

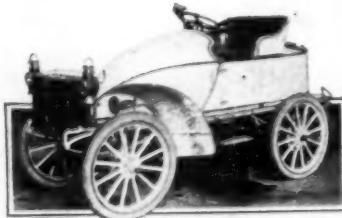
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THE AUTOMOBILE MAGAZINE

EDITED BY
ANGUS SINCLAIR



Fastest Automobile in the World

174 BROADWAY, NEW YORK, U. S. A.

Volume IV

Number

Smith & Mabley

Seventh Avenue and 38th Street
: : : NEW YORK



The
Panhard

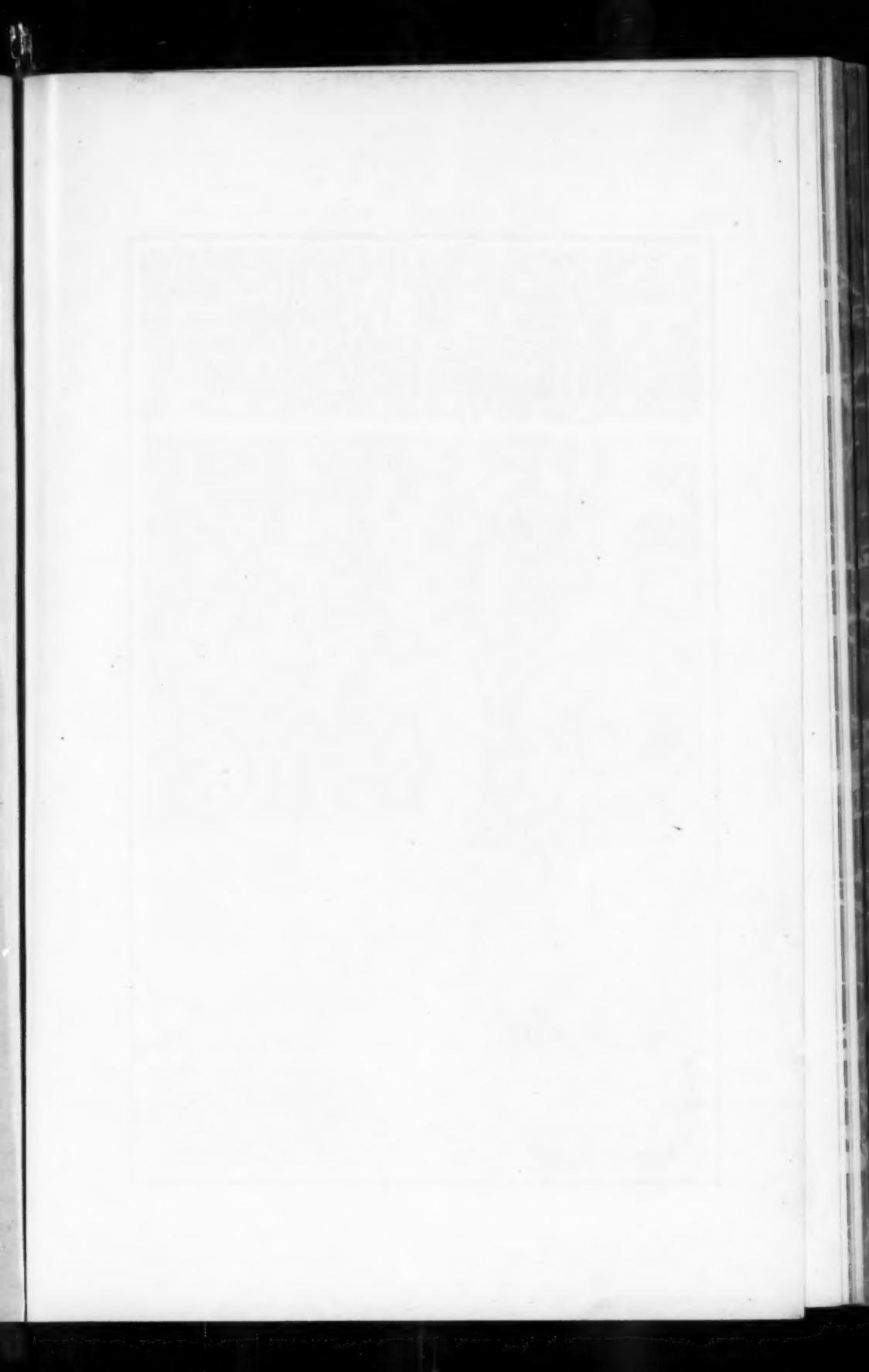
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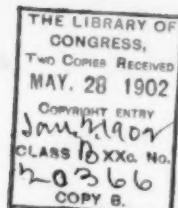
24 H. P. Panhard

Agents and Importers of Highest Grade Automobiles and Parts





Checking Hill Climbers on Roslyn Hill



THE AUTOMOBILE MAGAZINE

VOL. IV

JUNE, 1902

No. 6



Long Island's Century

BY FRANCIS P. PRIAL

A WORD or two on the Long Island Hundred Mile Endurance (?) Run, a bit of streakish description, an ingot or two of thought, perhaps, a loosely tied sheaf of fact and fancy, an aftermath of deduction and conclusion. Looking back now, when the mental and physical dust of that day had been entirely washed away, it is quite clear that the Long Island Hundred crowns with laurel primarily the promoting club, and, in another sense, the men who received the stipulated rewards, these latter deserving more commendation for holding in check the speed-impulse than perhaps for any other one thing.

For, in this day of motor car development, early though it yet be, the April 26th Century makes it certain that no very great merit attaches to any motor car capable of a leisurely hundred mile run over goodish roads largely devoid of hills and entirely free from specific ascent or descent calling for that final strain or that last high burst of speed which search out imperfection and bring the futile car to final grief. The Run proved beyond peradventure that a no-speed one hundred mile automobile amble

through fairly level country is, in these days, no tour de force, but rather a mere parade, an outing, an advertisement of the popularity and pervasiveness of motor-carism, and any self-driven vehicle which (barring of course specious accident) cannot be taken through such a run with highest satisfaction, is fit largely for the scrap-heap, is not for the salesroom, and the offering of such a car to the public were laughable, if it were not criminal; that is, criminality of the shysterian, gold-brick kind.

The run surprised in largeness of entry. The run, despite a



An interested lot of A. C. A. Members

bit of petty caviling, reflected several different kinds of credit on the Long Island Automobile Club. It was conceived in enthusiasm and managed with sustained energy. Its projection was a voluntary reaching-forth for a deal of work, criticizable, doubtful, unrequitable work. And once decided upon every available man in the Long Island Automobile Club—an effective, cohereing body of men they are—gave their all to make the event completely successful.

Of the affair itself, so much interest did it excite and so widely and exhaustively has it been photoed and written out that little now remains to be said. It is now generally known that April (26) saw her finish and like one who drowns in drink his sorrow, she went on a high jamboree. That historic Saturday might, nay

should have been a tender green day, a day of amethyst skies, and of finely spun sunshine? But no! No! No! The yelping hounds of the weather gods were unleashed all day long and Long Island was cloaked in grievous discomfort. Suffice it to say that it was a dusty, gritty, wind-worn day, one for overcoats, rubbered things and all manner and kind of protective habiliment, aided and abetted at periodic crucial moments by heating and stimulating drafts of fluidities.

There were a few major notable pictures, the start, for instance, the mile ascent of Roslyn Hill, the severely country crowd at Hempstead and, finally, the Babylon of the



At the foot of Roslyn Hill

finish. The heart of the thing was at Pettit's Hotel, in the old town of Jamaica, now legally, but not otherwise, part of New York city, Jamaica, a town of placidity, of solid undisturbable dignity, and seemingly as near the North

Pole as to the Tenderloin. The hotel itself is seared and seamed with probably a hundred winters. It was a classic in its day, and many a merry and bibulous crowd foregathered there to discourse on hogs and horses, the amenities of the trotting track, the awards of the country fair and much other gossip of the bucolic life. Even in the earliest day of cycling, Pettit's had not yet lost its halo, and "a run to Pettit's" with a teamster's dinner to boot was a thing to be rolled under the tongue days before and to be rehearsed in the club circle for days afterward. Jamaica and Pettit's, lying only ten miles from New York, exerted and still exerts the charm of a half-agricultural, half-residential country seat. And



by-the-by, since land is not sold in Jamaica by the square inch, the glory of Pettit's is not the unspeakable shoddiness enclosed by its four walls, but its obvious indeed, its only excellence is the great straggling yard which flanks it.

At nine in the morning those in interest had gathered at this place, a white and saffron-faced crowd, for the thing meant up and away at six o'clock, a forbidding hour surely for all city, indeed, for all thinking men. Besides, the morning was darkly cold, and the wet bluster of winds ate into the heart. At that hour a hundred machines and a thousand people were in the hotel yard. Car captains were busy putting on the last final touches of preparation. Scores of helpful men were at their beck and call. Automobile factories seemed to have debouched their practical men, fellows of oil and grime and the horny hand, fellows, real men who know how, each one as familiar with his machine as a Court physician is with the constitution of his King. These, moving hither and thither with much physical and vocal exuberance gave the cars their final grooming. It was amusing, affecting interesting, in a large way. The love of the true mechanic for the inanimate thing made for action—a gun, a yacht, a car and so on—approaches the human.

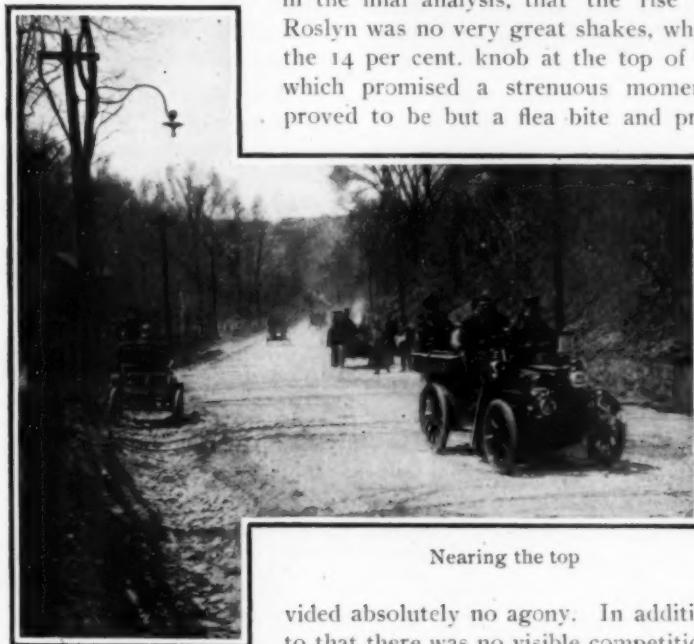
Hovering, strolling and pushing about were five score scribes open-eyed, ready-eared; also a company of camera men, a regiment of officials and observers, and finally, the fringe of purposeless loiterers, the simply curious, the mob of the open-mouthed. It was, you may be sure, an inspiring sight. The number of machines, the many styles, the tenseness of all concerned—all this spoke a big word for automobiling. As for the competitors, their enthusiasm, their anxiety was simply remarkable. They were as men going into a battle. These were of two classes, the private owner of a pet car, in which he deeply believed and was most anxious to show off, much as a groom puts through the pace a blue-blooded filly, one destined in another summer for a Suburban, for a Derby—the other class, the man of trade, the man with a factory and a ledger, who was staking and quite willing to stake his reputation on the performance of his product in the day's run.

Between nine and ten o'clock the cars had all somehow been gotten into motion, and were well on the way to glory or disgruntlement. Of the start it might be said that there was no uniformity or sequence or style. It was strangely non-military, spasmodic. But these runs are new, complex, biggish, and time and

experience will mend, improve and perfect. Later, in events of this kind, there will be more officialism, uniformity and absolutism, and, of course, less of the picturesque. Such was the start.

Through the courtesy of the Long Island Railroad, who provided a special car for the purpose, it was possible to observe the run at two interesting way points, at Roslyn Hill, twenty-two miles out, and at Hempstead, sixty miles away. The hill contest

provided no excitement. It developed, in the final analysis, that the rise at Roslyn was no very great shakes, while the 14 per cent. knob at the top of it, which promised a strenuous moment, proved to be but a flea bite and pro-



Nearing the top

vided absolutely no agony. In addition to that there was no visible competition, the final result being a matter of mathematics, and none knew who had won fast time prizes until nightfall.

At Hempstead, one merely saw the proverbial Long Island village. There was the town square, walled in with a shambling hotel, an odd tavern or two, a church and a school, the church, high-spired and immaculately white, a modest house of God. Lining this square were such Hempsteadites as had the leisure of a Saturday afternoon, a hundred or two in number, and the cars sailed through this lane of rustic humans without any very great



First in. Charles D. Cooke and H. Percy Maxim

thought that a non-competitor the vehicle rounded in front of the hotel, placard No. 3 appeared on it and the crowd gave it an excited welcome. Shortly after another car came breezing home, the crowd elated, the officials askant. In brief, the vehicles began now to rapidly arrive and it dawned upon the timers and judges that, unwittingly or designedly a dozen entrants had disregarded the "time limit" condition (6 hours 40 minutes for the run, a condition based on the speed laws) and had made a race of it.

As soon as this violation of the rules of the contest had been digested the officials stoically ignored all arrivals until the fixed minimum time had elapsed. It

claquer or eclat. One after another they quietly came into view, sailed around the turn and passed away. The blood was not aroused.

At the finish, the crowd, official and unofficial, waited for the real work to begin, at four o'clock, or thereabouts. But hours before that time they were aroused from various time-killing devices by the breathless arrival of a car. At first it was

was disporting himself; but, as

was disporting himself; but, as



A. L. McMurtry's Packard



Elwood Haynes in one of his own make

was at once bruited about that all cars arriving before the prescribed time would be disqualified, and this was afterward officially done, except that a car violating the rule only ten minutes or less was not cast into outer darkness. The general understanding that the "fast brigade" would surely be disqualified weighed lightly on the crowd and on most of the con-

testants. The former were interested and pleased over what appealed to them as "sport," while any disappointment the disqualified contestants may have felt was swallowed up in the sense of complete satisfaction that their cars had come through in fast time without accident, without development of flaw, or any weakness whatsoever, and they seemed to value that far beyond official blue-ribbonism. In certain private cases there was joy to the full, as, for instance, where A had beaten C on a purely speed basis, the contest being born of boast or claim, or of some other private circumstance. Thus it was a run degenerated, in part, into a race, with a half score of private wagers and comparisons up for settlement.

So, throughout the wasting afternoon, the cars came home, at first proudly and with triumph, later, dolefully halting, and still later, at night-fall and long after, straggling and disgustedly making their way back to the finish. At night there were clinking of glasses, much fluid and solid replenishment and over all compliment, babblement, congratulation, commiseration and explanation, with much truth and a leaven of romance.

Such was the history of the Long Island Hundred—a day of bedevilment, a strenuous drive through dust and gravel, a big collection of handsome and effective cars, an affair managed with courtesy, firmness and justice, a day of import to automobiling, a day proving that a fairly smooth hundred-mile run is meat and drink to the average motor-driven car—this run decided that. And now for more heroic contests, now for still more refinement, efficiency and beauty in manufacture.

LONG ISLAND A. C. ENDURANCE TEST.

April 26, 1901.—(Course 100 miles.)

Entries, 82; Starters, 66; Withdrawn or Disqualified, 28; Awards, 37.

BLUE RIBBON—NO STOPS—100 PER CENT.		HILL CLIMBS.
■ Vehicle.	Power.	
Toledo.	Steam.	Rochet-Schneider..... 1.19
Pierce.	Gasoline	Locomobile..... 1.42
Pathard.	Gasoline	Winton..... 1.42
Lane.	Gasoline	Peugeot..... 1.46
White.	Steam.	Prescott..... 1.59
White.	Steam.	Packard..... 2.03
Packard.	Gasoline	Packard..... 2.06
Century.	Gasoline	White..... 2.06
Elmore.	Gasoline	Grout..... 2.06
Knickerbocker.	Gasoline	Century..... 2.07
Knickerbocker.	Gasoline	Panhard..... 2.08
Haynes-Apperson.	Gasoline	White..... 2.08
Haynes-Apperson.	Gasoline	Toledo..... 2.10
Autocar.	Gasoline	White..... 2.20
Peugeot.	Gasoline	Autocar..... 2.30
Oldsmobile	Gasoline	Haynes-Apperson..... 2.33
Toledo.	Steam.	Lane..... 2.34
Packard.	Gasoline	Prescott..... 2.40
Winton.	Gasoline	Winton..... 2.59
Winton.	Gasoline	Gasmobile..... 3.05
Rochet-Schneider.	Gasoline	Knickerbocker..... 3.35

LONG ISLAND A. C. ENDURANCE TEST—*continued.*

RED RIBBON—98 PER CENT. AND OVER.

Vehicle.	Power.	P. C.
Prescott	Steam	99
Peerless	Gasoline	99
Panhard	Gasoline	98
White	Steam	99
Gasmobile	Gasoline	96

YELLOW RIBBON—95 PER CENT. AND OVER.

Vehicle.	Power.	P. C.
Gasmobile	Gasoline	95
Gasmobile	Gasoline	96
Torbensen	Gasoline	97
Peerless	Gasoline	97
Knickerbocker	Gasoline	97
Locomobile	Steam	96

HILL CLIMBS.

Long Distance	3.38
Gasmobile	3.42
Elmore	3.57
Peerless	4.04
Wheel Within Wheel	4.14
Olds	4.16
Haynes-Apperson	4.19
Haynes-Apperson	4.45
Peerless	4.53
Knickerbocker	5.02
Knickerbocker	5.36
Pierce	6.42
Gasmobile	6.46
Panhard	7.22
Torbensen Gear, Ltd	10.42
Toledo	11.46

WHITE RIBBON—91 PER CENT.
AND OVER.VERY HIGHLY COMMENDED—86 PER
CENT. AND OVER.

Vehicle.	Power.	P. C.
Haynes-Apperson	Gasoline	93
U. S. Long Dist.	Gasoline	91

Vehicle.	Power.	P. C.
Grout	Gasoline	87
Gasmobile	Gasoline	86

HIGHLY COMMENDED—80 PER CENT. AND OVER.

Vehicle.	Power.	P. C.
Prescott	Steam	83

GASOLINE CONSUMPTION FOR THE 100 MILES.

Vehicle	H. P.	Weight.	Passengers.	Gals. gas used.
Grout	4	900	2	12
Toledo	7½	1,500	2	12 15-18
Toledo	7½	1,400	2	13 7-9
Lane	9	1,350	4	17
Olds	4	800	2	3 1-6
Torbensen	5	800	2	4 5-9
Knickerbocker	6½	990	2	5
Knickerbocker	5	1,010	2	4 2-9
Knickerbocker	5	1,050	4	4 5-18
Autocar	—	1,000	2	5½
Winton	8	1,800	2	5 5-9
Peugeot	11	1,920	2	5 5-9
Elmore	5	1,600	2	5 7-9
Peerless	16	1,600	2	6
Panhard	16	2,600	4	13

Awards hill climbing test. For steam vehicles, all weights and powers. J. M. Page (Locomobile) time 1.42. Gasolene machines, under 1,000 pounds, W. J. Stewart (Autocar) time 2.30. Gasolene machines between 1,000 and 2,000 pounds. Percy Owen (Winton) time 1.42. Gasolene machines, over 2,000 pounds, and open class. Oliver Jones (Rochet-Schneider) time 1.19.

Going to the Races

THIS is Mr. Barclay H. Warburton, proprietor of the *Philadelphia Evening Telegraph*, and Mr. J. S. Bunting, manager of Wanamaker's automobile department, about to leave Philadelphia for the races. Incidentally, it may be remarked that the particular races the gentlemen were leaving for were more than a hundred miles away at Morris Park, New York. The gentlemen took things easy, reached the races in plenty of time, saw them



and when they sat down to dinner at the Waldorf in the evening they had covered just 158 miles, without either themselves or the Fournier-Searchmont they used suffering in any way from the trip.

Applied Automobilic Philosophy

"The thought of what other vehicle owners have," said the automobilist of moderate means, "never disturbs me; it is only the thought of what I haven't that occasionally makes me sigh."

Revenges of Time

A fool there was, who toiled for years
A certain wondrous vehicle to build,
No doubt he entertained no fears,
And only faith his bosom filled.

There as he labored, people came
And watched him ply his busy tool.
They made of him their sport and game
And said it was just like a fool.

His plan they called a vision wild,
A thing of naught, a rotten reed,
The idle day dreams of a child.
He labored on and took no heed.

Time passed; the fool grew old and gray,
His form was bent, his eyesight dim;
But still he wrought the livelong day
Until at last death called for him.

The years rolled onward, one by one.
Forgot that work of simple wit,
Until, discerning what was done,
A wise man came and finished it.

Going Out and Coming Back

I saw 'em goin' up the road like flashin' streaks o' light,
An' I didn't blame my good ole bay fur shuin' at the sight,
And in the distance minglin'
Chains an' laughter kep' a jinglin'

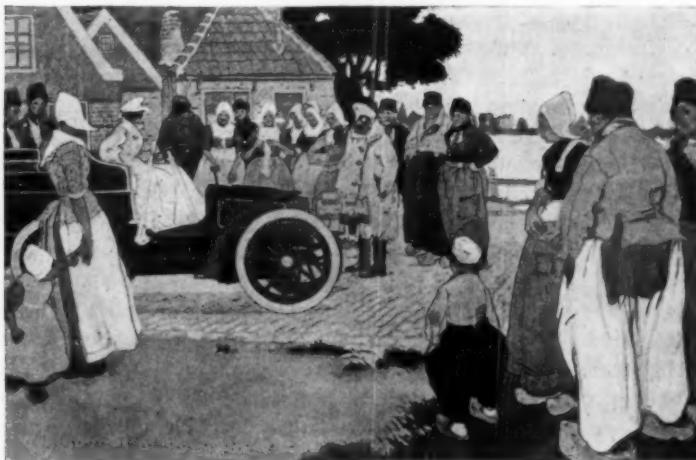
Till, ter tell the truth, I felt a heap more envious than polite.
The bay, he tried ter ketch 'em, but a wreath o' oily cloud
Was all that in the distance told the presence o' the crowd,
An' I says ter him: "Ole feller, tain't no use o' arguing;
The hoss is a back number, an' the motor's now the thing."
'Twas jes' a bit 'fore twilight when them motorers come along;
They wus goin' home on foot. 'Twas plain that suthin' had gone
wrong.

The broken chain links scattered
By an accident their hopes had shattered
I never see a more dejected, weary lookin' throng.
They all sung "Home, Sweet Home." I harnessed up an' pulled 'em
there.
An' when they gladly paid \$2 each by way o' fare
The ole bay winked one ear at me an' tried his best to say,
"The auto ain't in it, an' the hoss is here ter stay."

Utile Dulci

(Translated from the French of LOUIS MAILLANT.)

AMONG the mass of mechanical and practical details with which the subject of automobilism is, necessarily, deluged, and to which the motor reader naturally turns for general information, some consideration of the esthetic side of this feature of locomotion, in conjunction with the serious, seems like a refreshing April shower on a dry road, and settles the dust preparatory to beginning anew the treadmill of continuous scientific investigation which must attend the furthering of any new movement; especially does it inter-



How Holland Greets the Tourist

est when such a phase of treatment comes from the precise pen of a practical civil engineer of recognized authority.

It may not be without interest—in the spring of the year when, like so many brilliant dragon flies, the variegated swarm of multi-colored automobiles issues from its winter chrysalis—to cast an impartial gaze around, and measure the progress already made in automobiles as well as that which still remains to be accomplished. And since the *Nice-Abazia* course will once more provoke international competition perhaps this is not an ill-chosen time in which to perpetrate comparison and criticism.

In my opinion, the characteristics required for an automobile

are of two kinds: The practical on one side, the esthetic on the other.

An automobile achieves the practical if it is solid, reliable, simple, comfortable and within reasonable limits as to price. While the Americans criticise the cumbersome appearance of the French vehicle, the latter accuse the former of the opposite fault. Less height and more base—from which arrangement more stability and less surface resistance to the air follow as a natural consequence—is the more practical solution according to the French manufacturer's idea. Yet a modification of this French construction, along the lines of the American carriage, results in a more svelt production without lessening its elegance. It is a rather curious phenomenon to note that, contrary to the evolution of the locomotive—which, at its origin, was a veritable spider-web of mechanism for lightness and tenuity, but gradually became the compact, yet beautiful, monster we know to-day—the automobile, heavy and awkward at its inception, has followed a diminuendo scale of size progression in the motor as well as the carriage itself. As it stands to-day the motor is too fragile and too complicated. The parts, that are veritable jewels of mechanism, assemble like the different wheels of a watch. The tendency is to acquire less weight at any price, and in doing so there is danger of all sorts of accidents, resulting from fragility. We should seek solidity by employing the best materials, and above all, simplicity; the complex state we are attaining we shall need an assistant mechanic and even a whole staff, well organized, to manage this polyglot system of a motor vehicle.

It is recognized that the explosion motor has arrived at a point of quasi-perfection, and that electricity alone can afford us the simplicity and other advantages which may not be hoped for from petroleum; I refer to the suppression of odor, noise and vibrations. It is true that all these defects have been exalted into advantages; the odor, as it appears, is a guide to the chauffeur as to the state of carburation; the noise warns of the approach of an automobile; even the vibrations, if we may believe them, have a special virtue of their own and a hygienic value that no other modern medicinal discovery can equal!

It is none the less true that these things are extremely disagreeable from a purely sportsman's point of view and if the unfortunate man who is obliged to endure them finds himself squeezed and boxed up in a narrow seat where the forced immobility, due to lack of space, produces gradual ankylosis of the limbs, it may well be admit-

ted that touring is a snare and delusion, with comfort withheld. And this lack of comfort is a notable feature of the present style of automobile, whereas the mechanical carriage should be a veritable home, affording all the conditions of modern comfort. Formerly they contained more seats but the traveler was none the less cramped for room, since the manufacturer gloried mostly in providing seating capacity for as many passengers as possible; seats on the back, front, sides and everywhere, without regard to the legs of the victims, till it became an actual art to nicely interlace these respective members of the anatomy without too much damage to the owners, and find them again at the end of the trip.

In these days the motor has gradually advanced in position till it has come to the front, literally. This is evidently more practical and also more esthetic, but it narrows the seats and diminishes the seating capacity. But while forced to lessen the number of seats let us at least aim at width and space in front of them; the manufacturers who have considered these points are few. Like the locomotive and all animals adapted for purposes of conveyance, the most natural usage is to place the motor in front of the burden to be conveyed, but it does not follow that, like the locomotive, each part of the mechanism should visibly indicate the rôle it has to play in the scheme, for the automobile is both locomotive and wagon and should possess an appropriate exterior shape which suggests the motor without showing it; the muscles should be indicated but not bared to view. An ordinary carriage in which, without changing the aspect at all, one would succeed in inculcating the motor soul would be a misinterpretation.

There is more necessary than a merely handsome machine; it must be graceful and fascinating, and, by its pleasing exterior of good coloring and glistening metals efface the severity and lack-luster of the mechanism. I can conceive of nothing more alluring to the beholder than these motor vehicles, with their bright and varied colors, defiling gaily along in the sunlight which challenges responsive gleams from the nickel trimmings. Do you know anything more charming than this gamut of beautiful colors when they harmonize with the artistic and specially selected toilets of the dainty feminine occupants (when the disfiguring masks and goggles are discarded)? The beautiful must be encouraged all along the line of automobiling.

Far be it from my intention to stifle any initiative attempt at construction; rather would I give free bridle to every fantasy, even

the most abracadabrant, if thereby the different types of the future motor vehicle may be sooner determined. Let us favor trials and competitive shows to encourage research and gain disciples to the cause of automobilism.

Myself, I would not award the prize to any carriage with the four wheels of equal diameter. I would prefer reviving the old manner of making the back wheels larger than the front; it is a much more logical arrangement, inasmuch as they almost entirely support the heaviest part of the carriage: the body and the passengers; therefore, as it is more natural, it is more beautiful. I would also like, combined with the motor at the front, a sort of artistic protective filament, acting as a brake at the same time, which would give a narrowed effect, prolonged towards the bottom like a spur; this would add both safety and grace of line.

Finally, since the wish costs nothing, I should like to see each automobile bearing a name or device. Why not give a simple baptismal name, at least, to this creature instinct with life and motion? It adds a personal link of almost human friendliness between the owner and his carriage, as between man and horse. We know the huge numerals—that all innate good taste revolts at—serve well enough as a method of obligatory identification, but how much better and more individual to select an appropriate name according to the type of vehicle; short and simple for the voiturette that seems to fly over the ground without touching it; something energetic and high-strung for the racing car; an heroic, sonorous title for the military transport. Then, to aphorize the situation: Tell me the name you have given your auto and I will tell you what manner of man you are. Some emblem, if you like, such as vessels bear, blazoned on the side or back of the vehicle, with the name; to my mind, those immaterial conceits add charm and poesy to our dull, prosaic age. And if ever I should one day baptize one of these motor progeny the name which would first rise to my lips, as it should to those of every chauffeur truly worthy of the title, would be the "*Prudent*."

Only Time Could Tell

"Hey!" shouted the cycle policeman, as the man in the big racing car started to go past him like a railroad train, "ain't you riding a trifle more than eight miles an hour, sir?"

"How do I know?" howled the speed maker over his shoulder, "I haven't ridden an hour yet."

Not an Easy "Egg" to Beat

I was only in the natural order of things that M. Leon Serpollet, inventor of the famous flash boiled steam automobile with which his name is now forever linked, should at Nice last month, have come away with another of his innovations in vehicular designing and along with its appearance indulged in his annual reconstruction of the record list. This time Mr. Serpollet introduced the vehicle here shown which, in accordance with its design and the period of its appearance, he facetiously named the "Easter Egg." Equipped with a twenty horse power engine this vehicle was sent for the record and the Rothschild cup. The kilometer (.621 of a mile) was done with a



flying start in 29 4-5 seconds, which was equivalent to a speed of more than 120 kilometers (over 75 miles) per hour, a performance which will take considerable figuring on the part of M. Serpollet's gasolene competitors before they succeed in eclipsing it. The vehicle itself was bought upon the spot for \$11,000 by an Englishman who had no sooner landed it in England than he sold it for \$17,000, showing that the public is still willing to pay fancy prices for speedy vehicles.

What the Difference Is

"Pop, what is the difference between an automobile editorial and a screed?"

"Well, if you are a horseman and the article attacks automobiles it's an editorial; if it favors the automobile it's a screed."

British Notes of the Month

By A. F. SINCLAIR

THE A. C. G. B. I. has done much good work for automobilism in this country, and few of its efforts have been more important or more effective than its recent manifesto to the press of the United Kingdom on the speed question. The legal limit, that is to say, the highest speed permitted an automobile by the Act of 1896, is fourteen miles an hour, but as the act confers on the several local government boards the power of reducing—under no circumstance can they increase—the maximum, it has been reduced in all the counties to twelve miles an hour.

This absurd limit on vehicles capable of covering a mile in a minute and a half has led to persistent violations of the law, which, however, in the vast majority of instances have been disadvantageous to no one. But county magnates, gifted unfortunately with more power by circumstances than with sense by Nature, who have found the slumberous quiet of their roads disturbed, and their monopoly of them for horse exercising purposes invaded by the swift and energetic *teuf teufs* have influenced the police to interfere, and the result has been the adoption of a system of traps for the unwary motorist, and prosecutions—one might almost write persecutions—all over Britain.

When a policeman arrests or prosecutes a man, he is not over scrupulous about the means he uses to secure a conviction, and he has been known in an unguarded moment even to swear to things that were not, but one never hears of the prosecution of such men for perjury. In a North London police court not long ago in an automobile prosecution case a policeman swore that he could cover a certain distance at a speed which worked out at something over a mile a minute, and this statement was not only corroborated by his comrade—they watch and swear in pairs—but he added that he could run even faster himself.

Convictions have been both numerous and costly, for whereas if the driver of a horse-drawn vehicle was convicted of reckless driving a fine of half-a-guinea—about two and a half dollars—would probably be levied; in the case of motor propelled cars, fines range from two to ten pounds—ten to fifty dollars. The press, also, by magnifying trifling accidents, and by perverting facts to the disadvantage of the automobilists, has been guilty of maintaining if not of

augmenting, the conservative prejudice against automobiles. It was absolutely necessary that something should be done, and in issuing the dignified manifesto mentioned the club deserves the thanks of all interested in automobilism.

The club's manifesto after expressing agreement with the opinion of Rt. Hon. Lord Thring, K.C.B., that "there is no worse law than a law which is not respected" goes on to give a summary of the brake tests held at Welbeck Abbey in the presence of local government board officials on the 11th of January as proof of the auto car's controllability, and points out that a motor propelled car going at twenty miles an hour can be stopped in a less distance than a horse-drawn vehicle going at half the speed.

It then complains of the vexatious twelve miles an hour limit, and of the systematic prosecutions for merely technical offenses to which it has given rise, and shows that this policy has had the effect of discouraging and damaging an industry, which, under the more enlightened treatment received on the Continent, and in the United States, provides work at good wages for thousands of workmen.

A claim follows for the abolition of the speed limit, subject to such restrictions as may be necessary for public safety, and the easy identification of fast speed cars. After some remarks regarding the senseless restrictions on heavy vehicular motor traffic, it expresses the opinion that motorists should have a ready form of appeal from "Justices'" justice, and concludes by urging those to whom it is addressed to assist in securing an amendment of the law.



An English Motor Coat

The signatories are the Duke of Sutherland, the Earl of Shrewsbury and Talbot, the Earl of Onslow, Earl Grey, the Earl of Verulom, the Earl of Wharncliffe, Lord Montagu of Beaulieu, and many others, including the Lord Justice-Clerk of Scotland, Sir J. H. A. Macdonald president of the Scottish Automobile Club, and the presidents of the Automobile Clubs of France, Belgium, Germany, Austria and Switzerland.

A copy of the manifesto was sent to every newspaper in the United Kingdom, and to many influential individuals, and its circulation has already had a beneficial effect. Many of the leading newspapers devoted special articles to it, some of them advocating its views in such a whole souled manner as to suggest the automobilist behind the editorial impersonality. Even the *Times* (which by the way is referred to by a writer in one of the technical papers with that complaisant arrogance peculiar to some Englishman, and so exasperating to other nationalities as "the leading newspaper of the world") throws the whole weight of its influence into the scale in favor of the automobile, and as representative of the general press attitude its concluding remarks are worthy of reproduction here.

After referring to the manifesto as a "cogent and indeed unanswerable criticism of the existing regulations as to motor cars" it concludes: "The demand is only for fairplay for the pioneers of a new industry, for an intelligent consideration of the existing conditions of the problem, for discrimination between madcap drivers who wish to make a splash and flutter, and those, the great majority who seek to study the safety of the public. The communication which we have noticed leaves a strong impression that the industry has been kept in leading strings too long and that the existing regulations should be recast in the light of facts which were unknown or doubted in 1896." Notwithstanding the necessity for legislation, however, there is no hope of an immediate change in the law.

The legislative machine is already overburdened with work bearing on more important matters than the welfare of any single industry, and another year, at least, must elapse before any remedial measure need be expected. Meanwhile Great Britain continues to purchase from France alone automobiles worth on the average £45,000, about \$220,000 per month.

What is written above will show that the writer has every desire to concede its full measure of justice to the A. C. G. B. I. That it has done much good and useful work everyone admits, but it cannot by any means be considered as a model organization to have in its

keeping the control of an important and growing industry. Any body to which admission can only be obtained by means of an exclusive ballot, and on payment of an exclusive club subscription should not have power to influence the business of automobilism.

For purposes of propaganda it is an admirable institution, but its functions should cease there. As at present constituted the club represents automobilism as a sport or pastime rather than as a business, and although the high social standing of many of its members has secured for it a hearing in quarters which would have been deaf to less prominent people, it is open to question whether greater progress would not have been achieved had the controlling body been one representative of all prepared to pay a reasonable subscription.

It is true that all the movements of the club are performed in a highly dignified and diplomatic fashion, but it is doubtful whether vigor and energy combined with ordinary business tact would not have been more useful than the qualities mentioned in voicing successfully the outcry of a strangled industry.

It is no aspersion on the club to say that some of its methods are not beyond the reproach of being unbusinesslike. This was pointed out in these pages when the judges appointed in connection with the trials last September declined to furnish details of the points on which their awards were based.

To award medals to certain cars for superiority of design, finish, or mechanism, without specifying in what respect they were superior, was to miss the whole object of the trials.



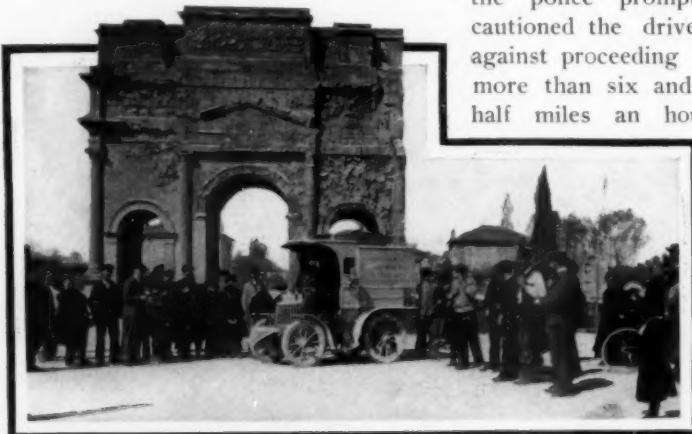
My Lady Abion's Motor Cloak

Touring in Motor Wagons

By R. F. COLLINS

WHEN Mr. W. K. Vanderbilt, Jr., was driving his Mercedes down to Nice at a speed which the policeman at a certain French town thought slightly excessive, the motoring millionaire was asked to give his name, and from the card handed to him the gentleman in blue duly made out a summons for furious driving against Monsieur Junior. The automobile wagons and omnibuses which undertook a long run of 700 miles from Paris to Monte Carlo did not receive any such attention from the local authorities, until they had arrived at the gambling principality whereupon

the police promptly cautioned the drivers against proceeding at more than six and a half miles an hour,



At the Roman Arch at Orange

which was about half the average speed at which most of the vehicles had traveled all the way from Paris.

But if the speed was well within the legal limit the passengers had ample opportunities of seeing the country and this compensated for the absence of tingling excitement in rolling down mountain roads, around jutting rocks, skirting precipices, and in other ways being seemingly in constant danger. In reality the entire trip was perfectly safe so long as the control was in the hands of a cool and experienced automobilist who knew the way and kept a strong hand on the steering wheel.

Traveling in a steam van or a gasoline wagon is not, however,

quite so comfortable as doing the same thing on a touring automobile. There is nothing particularly exhilarating, for example, in finding oneself stopped at midnight for lack of fuel on a lonely road, and thereupon trying to sleep on bags of sand which constituted the vehicle's load until the desired fuel could be obtained in the morning. This happened to me on one occasion during this trip. But nevertheless the experience is one that does not often occur, and is therefore all the more interesting. Besides, one soon forgets these little discomforts and inconveniences in the pleasure of overcoming them.

This run from Paris to Monte Carlo was unique in so much that never before had twelve industrial vehicles traveled such a long distance together. It was a great educational experiment and its suc-



Arrival in Nice

cessful accomplishment brought home to many thousands of people the value of mechanical transport. From an economical point of view it was still more interesting, since it proved that heavy loads can be conveyed under the most trying conditions, over water-soaked roads and up steep gradients, very cheaply and with great regularity. The distances covered each day of this run being a little more than sixty miles.

The test has suggested one thing that might very well be taken advantage of by enterprising transport concerns in countries offering inducements for touring, and that is the profit which they could

derive from organizing long pleasure trips. Nothing could be more delightful than was the tour in gasoline omnibuses along the valley of the Rhone, dazzling with the colors of spring, under a blue sky, at a moment when Paris was swamped with rain; and over the rugged and picturesque Esterel, and along the orange and palm bordered roads of the Mediterranean coast to Monte Carlo. The vehicles were very comfortable, and they ran the whole distance without an accident of other than the most trivial kind.

With a consumption of four gallons of gasoline a day these omnibuses carry eight passengers besides a fair amount of luggage, so it can easily be calculated therefore just what profit could be made by an owner who started a service of touring vehicles of this kind through interesting districts which are not easily accessible. Even over the well-known touring routes such a method of conveyance would have a great advantage over any other, since the passengers would miss nothing and would be able to see everything at their leisure. As the costly automobile is the touring vehicle of the few so the gasoline omnibus and coach seem to me to have great possibilities as a means of creating a touring traffic for the many.

Nice, May 3.

Using Change Speed Gears.

CHANGE speed gears and the proper employment thereof are things which entirely too few of those who use them properly understand or even appreciate. Considering the importance of this subject, entirely too little attention has been given it in the columns of the trade press and an exhaustive article in a recent issue of the *Motor Mart* is therefore both timely and welcome. The writer of the article goes on to say:

"There is a distinct knack in changing the gearing of a car which I fear is hardly appreciated by many drivers, which fact is mainly responsible for the great amount of damage which is often caused to the teeth of the wheels of gearing of the Panhard type. That this pattern of gearing leaves much to be desired is generally admitted, and the dashing of the wheels in and out of gear while they are running does not commend the system in the eyes of those who are mechanically inclined.

"But after all, when the driver of a car is fairly smart and when the clutch is fitted with a stop to automatically either bring it to rest or decrease its speed in proportion to that of the car, the gearing can

be changed without that jarring which seems inevitable when the vehicle is in the hands of the novice or a bad driver.

"In many cars, however, no stop is fitted to the clutch, and it must be admitted that the jarring often caused by throwing in the first gear after the car has been at rest is very great. This is owing to the fact that the clutch shaft has been set in motion by the motor, which has been, perhaps, running at a rapid rate, and, as the male portion of the clutch is fairly heavy, the shaft maintains a great deal of this speed when disconnected from the motor.

"I have found that the placing of a leather-covered stop against which the head of the clutch may be pressed when the pedal is pushed hard down, effectually overcomes the difficulty of throwing the first pair of wheels into gear, and also greatly assists in changing the other gears, while, providing that the stop be made sufficiently strong and the movement of the pedal be properly proportioned, the stop may be made to actually form a third brake. Apart from these constructional details, there can be no doubt that a good many drivers of cars do not give sufficient attention to changing the gears evenly, and at precisely the right moment.

"A good many will be in far too great haste to get the high-speed gear in action directly the car nears the summit of an incline and often before the vehicle is fairly on the level, and so has approached the best pace of the lower gearing. With cars of gear-driven type this haste results in nine cases out of ten in the vehicle struggling along at a slow speed for some distance, or actually threatening to stop, in which case the low gear has to be again thrown in, thereby setting up additional and totally needless wear and tear, for it must be remembered that it is in changing the gearing that damage is most likely to occur.

"Moreover, some drivers habitually miss the changes, and, consequently, allow the car to lose so much speed during the time that the motor is disconnected, that by the time that the gearing is again thrown in, the engine has too much work to do in picking up the speed of the car.

"Few drivers seem to realize that a great deal of the power of the petrol motor depends upon the speed at which the engine is running, which probably accounts for the fact that they often give the motor more to do in the matter of driving the car faster at the very time that it is running slowly, and has not commenced to 'romp' with the low-speed gear in action.

"As a matter of fact it will always pay the motorist to thor-

oughly learn the art of changing the gearing of his car in such a manner that the least possible strain may be thrown upon the working parts. The golden rule to remember is that the engine should never be worked to such an extent that it is obviously running under the worst possible conditions.

"Better to change to the low gearing as soon as the speed of the motor drops to such an extent that its power is obviously below the normal, and not to attempt to throw in the high gearing again until the speed of the engine is once more well above the proper rate. It will be found that this course will greatly prolong the life of the motor, and that, in the end, a better all round speed will be maintained, because the car will at once get under full speed, and will not struggle along for a hundred yards or so before commencing to increase its pace to that attained under the best conditions."

Lament of the Poor Man

If I had but a thousand a year, Gaffer Green,
If I had but a thousand a year.
What a man would I be and what sights would I see,
If I had but a thousand a year.
I would get me an auto of latest design,
My face with the joy of possession would shine,
By jingo, I'd feel that the whole world was mine,
With an auto and a thousand a year.



Mr. Myopia, the famous coaching enthusiast, finds it difficult to forget his former love

The "St. Lawrence" Car

THE title, sweet reader, has nothing to do with the river of that name, nor indeed with anything American, but has its origin in the name of a church dedicated to St. Lawrence away back in time obscured by the mists of "iniquity," as one old lady expressed it, when Scotland was little more than an appanage of the Church of Rome.

In some previous notes in this magazine it was the writer's privilege to describe one or two highly finished, elaborately constructed automobiles in the building of which all the modern appliances, all the necessary intricate machine tools, and some of the



highest skill and most thorough knowledge on the subject were brought into use. But all automobiles are not produced under such conditions, and although there is no doubt that the tendency of the times is in the direction of centralization, and what for want of a better word may be termed "specialism," there is still room for the individual to exercise his talents and skill. Such individualism deserves encouragement for it is from such rather from the busy workman of the overworked factory that improvements are to be expected.

It is well-known that all over the country at the present time, alike in the busy haunts of industry and in quiet villages, mechanical

ingenuity is being earnestly devoted to the construction and improvement of motor cars, but it must be confessed that many of the so-called improvements scarcely deserve the name tending as they often do to render more complex a machine already sufficiently complicated. It is therefore refreshing to encounter one of what may be called these experimental machines in which simplicity of construction combined with reliable action, have been aimed at and attained.

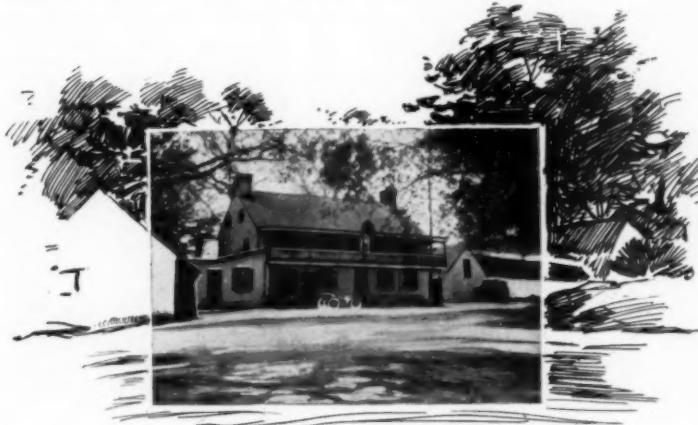
The car shown is the work of Mr. John Tavendale, cycle builder and engineer, Lawrencekirk, a small town about thirty miles southwest of Aberdeen, Scotland, situated on the main road from Perth to that city. Mr. Tavendale is a natural machinist as well as a trained mechanic, and when cycling was on the boom about six years ago he fitted up a workshop with modern machine tools and began cycle construction. Lately he has taken up the building of automobiles, and this car is a specimen of his work.

The car has a frame of hard wood strengthened where necessary by iron fish plates, and is carried on elliptical laminated springs resting on fixed axles. The front wheels are thirty inches in diameter, those in the rear thirty-six inches. They are ordinary Werner type carriage wheels and are fitted with solid north British rubber tires. It will be seen that the vehicle is of the dog-cart shape, but what is not apparent is its color which is a light oak shade.

The motor is a six B. horse power Accell-Turrell which was purchased ready for use, but on which Mr. Tavendale has since effected considerable improvements. It has one cylinder of four inches bore and five inches stroke, and is placed in a vertical position behind the dashboard. The bonnet which covers it may be seen in front of Mr. Tavendale's feet. It gives 1,200 revolutions per minute, at which the horse power mentioned is developed, and is, it is perhaps unnecessary to mention, Otto cycle in principle, while the crank throw is two and one-half inches. The carburettor is of the float-feed needle-valve variety and was supplied by the Endurance Motor Company. The ignition is electric supplied by a battery of dry cells. The commutator consists of a roller mounted on the half speed shaft, on the face of which is a worm-shaped slightly spiral ridge. Bearing in a leaning position against the roller is the brass tipped end of a plate lever which is hung on a pivot near its middle, and is operated by a handle attached to the steering pillar. As the brass tipped plate is moved from one end of the roller to the other, the moment of contact with the ridge is varied, and the firing regulated.

In the Good Old Days

WHEN the road coaches ran from New York to Philadelphia, Albany and Boston the inns that cared for the comfort of the passengers were often named in honor of the horse. On the swinging signboards met by the travelers along the old post roads such titles as "The White Horse" were frequent, and the early American painters



Old "Black Horse" Inn near Philadelphia

in their off season thought it no lessening of their artistic standing to sketch on the signboards the prancing equine which gave title to the inn. Afterward, with railroads came the era of the commercial hotels built close to the stations, and the road houses and village inns languished or became caterers to summer boarders. The vogue of the automobile may bring back those good old days when "entertainment for man and beast" was a much more obtainable thing in non-urban localities than it is now.

Pegasus Has His Opportunity

"His poetry," the public complained, "smells of the lamp!"

At this Pegasus reverted to his equine side and indulged in a horse laugh.

"I suppose it's the odor of that gasoline vehicle he tied up to after I bucked and threw him!" whinnied the fabled steed.

Some New Suspension Ideas

THE prevention of vibration must not be left entirely for the pneumatic tire. Already that valuable, but not too stable, part of the automobile's equipment has all that it can do, and future efforts at the elimination of vibration must be made along other lines. The first step in this direction will, of course, be along the lines of improved springs and in this direction the new Mayback idea from abroad seems to possess other merits besides those of novelty. The principle is to place the springs relatively to the axle and the body in such a manner that the front extremity of the springs rests on the axle, the other extremity being fixed to the body, while the weight is supported by the middle of the spring.

It will at once be seen that by this arrangement the greater part of the spring is kept under the body, even when the axle is placed considerably in front of the frame. The axle is provided with guides preventing any lateral movement of the spring, but permitting a longitudinal movement.

The springs are held in their centers by clips, the upper parts of which are rounded and take a bearing in brackets fixed to the frame. These brackets are provided with arms which prevent displacement of the springs. To these brackets the axle is linked by two connecting rods.

It would seem that by this system the steering gear would be relieved from much of the strain it is usually subjected to. The designer claims that the breakage of a spring entails no danger, since the wheels are always maintained in place by the two connecting rods. This, however, would need actual demonstration before it could be accepted as being absolutely so.

Force of Habit

As the old mythology evolved the legend of the centaur or man-horse, so we may expect the new school of scientific romance to evolve an androcycle or man-wheel. Anyhow the centaur is entirely played out. For example, a friend of mine who rides a certain amount during one month of the year and motors a good deal during the remaining eleven, told me that the other day, having gone out on horseback after a long interval, and wishing to pass some obstacle in a narrow lane, he found himself instinctively feeling for his speed lever on his horse's neck!

When Wagons Ruled the Road

By REGINALD BIRKBECK-BROWN



T seems curious to think, in these days of distance demolishing automobiles, of a time when travel through this part of the country was by wagon. But there was a time when the creaking, clumsy, horse-drawn vehicle, was the only means of moving. Traveling in a ten horse power gasolene touring car to New York, recently from Baltimore, recalled what Morris Birkbeck wrote so many years ago. For instance, after having commented on the fact that Americans were a migrating people, this British ancestor of mine goes on to say:

"To give an idea of the internal movements of this vast hive, about twelve thousand wagons passed be-

tween Baltimore and Philadelphia in the last year, with from four to six horses, carrying from thirty-five to forty hundredweight. The cost of carriage is about seven dollars per hundredweight from Philadelphia to Pittsburg. Add to these the numerous stages loaded to the utmost and the innumerable travelers on horseback, on foot and in light wagons, and you have before you a scene of bustle and business, extending over a space of three hundred miles, which is truly wonderful."

Then he was greatly struck by American manners, for he says: "But what is most at variance with English notions of the American people is the urbanity and civilization that prevail in situations remote from large cities. In our journey from Norfolk, on the coast of Virginia, to Pittsburg, we have not for a moment lost sight of the manners of polished life. Refinement is unquestionably far more rare than in our mature and highly cultivated state of society; but so is extreme vulgarity. In every department of common life we here see employed persons superior in habits and education to the same class in England."

But Birkbeck didn't like the hotels. I remember he wrote: "Three times a day the great bell rings, and a hundred persons collect from all quarters to eat a hurried meal composed of almost as many dishes. Soon after dinner you assemble in rooms crowded with beds, something like the wards of a hospital, where, after undressing in public, you are fortunate if you escape a partner in your bed."

That's somewhat how America impressed Birkbeck. Does my contribution pass muster?

English As She Is Understood

In an article entitled *Étymologie Sportive* (which title translates itself), our French confrère, the *Vélo*, has exhibited a truly super-human effort to render, in his language, an equivalent in both sense and pronunciation for some of the English terms that our sporting fraternity has fitted to its own requirements. In some instances the outcome is so droll that a reproduction cannot fail to amuse, but we must add, in justice to the French intermediary, that he has bravely interpreted many of our colloquialisms and courageously offers to tackle any others he may have omitted if some reader will designate them.

The present translator, who rendered the English pronunciation of the Persian terms retained in Fitzgerald's *Omar-Khayyam*, for Mosher's "vest-pocket series," and who still retains painful memories of that struggle, is in a position to sympathize sincerely with *le Vélian*.

Modest

"I haven't been out since the night I got arrested for riding up Seventh avenue without a light."

"You ought to have known better."

"Truth is, I wasn't doing anything of the kind. The only trouble was I had just got the old machine warmed up and I was going so fast that the light from my lamps didn't have time to get ahead of me."

His Most Conspicuous Fault

The lightning bug is brilliant,
But he hasn't any mind;
He blunders through existence
With his headlight on behind.



A Study in Stopping

FOR an affair undertaken on the spur of the moment few automobile contests have been as perfectly planned and carried out as were the brake tests of the Automobile Club of America. With no preliminary announcements of any kind the public was given such conclusive proofs of the controllability of an automobile as to admit of no possible doubt of the vehicle being one which was safe under all the requirements of ordinary traffic.

By permission of the park authorities a stretch of level roadway on New York's far-famed Riverside Drive had been placed at the disposal of the Automobile Club for the purpose of demonstrating the stopping possibilities of the three popular means of locomotion—the horse, the bicycle and the automobile.

The test was perfectly fair and the conditions were such that it was impossible to favor one method of locomotion against another, even if there had been any desire to do so, which there was not. Each competitor started one-tenth of a mile away from the point where the brake was to be applied. Upon crossing the starting line the wheels of the





brought to a standstill.

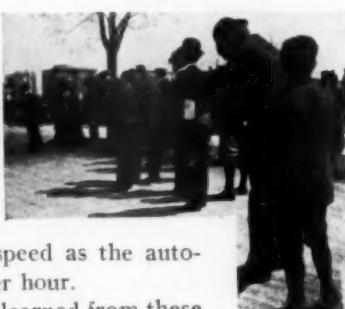
The average weight minus passengers of all the automobiles competing with 1,395 pounds; the average of their speed during the contest was $17\frac{1}{4}$ miles per hour and the average distance which it took them to come to an absolute stop was 31 feet, 6 inches.

Compared with this it took a two-horse victoria while proceeding at an average speed of $11\frac{1}{4}$ miles per hour an average of 27 feet, $2\frac{1}{4}$ inches to stop; a four-in-hand coach traveling at an average of $12\frac{1}{4}$ miles per hour required a distance of 56 feet, 9 inches to be brought to a standstill; while a bicycle going at an average of $18\frac{1}{4}$ miles per hour could only be stopped when it had traversed an average distance of 66 feet, 11 inches.

To better illustrate the comparative values of foregoing averages the drawing herewith has been made after a computation of what the stopping possibilities of all the vehicles would be if they had each been proceeding at the same average speed as the automobile, that is to say, $17\frac{1}{4}$ miles per hour.

Among the many other things learned from these

vehicle automatically started a stop-watch at the finishing line, which watch proceeded to time the vehicle's speed until it was stopped by the signal to put on brakes. When the vehicle was passing over some one of a number of lines painted upon the road a horn was blown and the brakes were applied. The distance between the point where the signal was given and the one where the rear wheels of the vehicle rested when it was finally stopped was then measured and the result was the distance wherein such a vehicle was credited with capable of being





tests was that the average automobilist is very far from being a good judge of pace, particularly when he is doing low rather than high speed traveling. Another interesting comparison was the difference between the average of results of similar tests made by the Automobile Club of Great Britain and Ireland, which differences are shown in the following table:

BRITISH.	AMERICAN.
From 11 to 14 miles per hour, 20 feet.	Average of 8 miles per hour, 8 feet.
" 15 " 17 " " " 24 "	" " 14 " " " 26 "
" 18 " 20 " " " 33 "	" " 20 " " " 53 "
" 20 " 24 " " " 42 "	" " 26 " " " 101 "

Just why this wide variance should exist between the averages of the two tests is not easy to understand, since the average of the kind and make of vehicles used in both cases was practically the same, with the exception of an increase in the number of steamers in

the American tests. Figures can be made to prove many things and perhaps in the present case they will be made to prove that either the

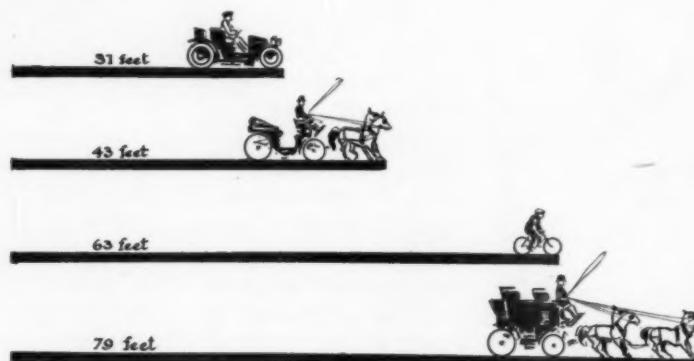
American vehicles are not as well provided with brakes as the English ones are or the American automobilist is less expert in the use thereof. Our own opinion is that the former will be found to be nearer the true status of affairs, British laws being particularly exacting as to their requirements for the number and the efficiency



of the brakes with which each automobile must be equipped before it is permitted upon the highways in Great Britain.

TABLE OF RESULTS—BRAKE TESTS, RIVERSIDE DRIVE, MAY 1, GIVING AVERAGE SPEED AND STOPPING DISTANCES.

	Weight.	About 8 miles per hour.		About 15 miles per hour.		About 20 miles per hour.	
		Speed.	Distance.	Speed.	Distance.	Speed.	Distance.
Pierce (G).....	650	.....	.....	15.6	33' 8"	.....	.....
Oldsmobile (G).....	800	8.7	8' 9"	14.4	21' 7"	20.0	58' 6"
Locomobile (S).....	1000	7.8	5' 9"	16.3	30' 9"	22.5	51' 5"
Friedman (S).....	1000	6.9	7' 2"	17.1	57' 9"	.....	.....
Autocar (G).....	1050	8.0	9' 10"	14.4	31' 8"	20.0	69' 3"
Waverly (E).....	1050	8.7	4' 4"	13.8	21' 5"	.....	.....
Haynes-Apperson (G).....	1200	9.4	11' 5"	13.8	21' 2"	.....	.....
White (S).....	1350	7.5	6' 9"	15.0	31'	21.1	75' 2"
Toledo (S).....	1400	7.6	4' 9"	16.3	34'	20.0	46' 8"
Long Distance (G).....	1400	7.6	4' 9"	15.8	25' 11"	18.9	29' 2"
Peugeot (G).....	1920	6.4	4' 2"	15.6	40' 10"	.....	.....
Panhard (G).....	2000	7.6	7' 11"	.....	.....	.....	.....
Riker (E).....	2100	9.4	5' 11"	16.3	25' 4"	18.9	34' 6"
Gasmobile (G).....	2100	11.2	43' 5"	.....	.....	.....	.....
Mors (G).....	2000	6.7	5'	12.0	9' 9"	20.0	34' 11"
Packard (G).....	2500	9.2	10'	15.0	22' 2"	22.5	75' 9"
Average .....	.....	7.9	9'	15.0	29	20.4	53'

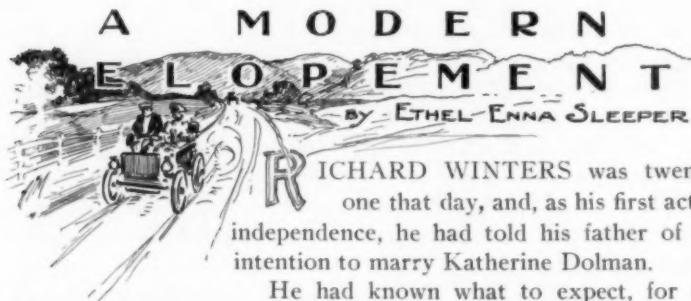


HORSE VEHICLES.

Victoria (2 horses).....	900	9.0	17' 8"	13.8	36' 10"	.....	.....
Four-in hand coach.....	2500	9.0	26'	16.3	77' 6"	90' 10"	.....
Average.....	.....	9.0	21' 10"	16.3	68' 5"	.....	.....

BICYCLE.

No. 1.....	.....	9.4	8'	.....	.....	.....	.....
No. 2.....	.....	20.0	61' 6"	.....	.....	.....	.....
No. 3.....	.....	27.6	131'	.....	.....	.....	.....



RICHARD WINTERS was twenty-one that day, and, as his first act of independence, he had told his father of his intention to marry Katherine Dolman.

He had known what to expect, for the girl's mother had jilted the Major twenty-five years ago, and, being, like a good many others in the world who are willing to "forgive but can't forget" the Major had never quite gotten over it, and now he frowned and muttered "Bless my soul!" While Dick in a manly straightforward way told of his hopes and plans for the future.

His thoughts went back to his own youth and the days when pretty Mary Baxter was all the world to him and for a moment he was tempted to sanction the match, but the resentment cherished all these years was not easily put aside. Here was a chance to "pay back" Mary Baxter's treatment, and his heart hardened as he said curtly "Not by a long sight young man. The day you marry Katherine Dolman you will be no son of mine, and I'll put a step-mother in your place."

"But father"— "Not a word sir! You know the consequences of such a marriage!"

"Yes, and am willing to take them," and without another word Dick turned and left the room.

The Major sat like one stunned by some dreadful blow. Had it come to this, was his severity going to bring about the very thing

he wish to avoid? Why the boy must be crazy! Going to marry and leave him for that chit of a girl, who like her mother, probably cared for money and had consented to become his wife because she knew of the Major's millions.

It was too much to be borne, and the Major paced restlessly back and forth across the room as he thought of the woman who was to have been his wife, but, who but a day before the marriage jilted him to marry Harold Dolman, a worthless scamp who had died only a year after their marriage and left her with a legacy of debt and this one child who had inherited all her mother's beauty.

They had managed to live comfortably upon a small sum left by a relative, but there was little enough money for comfort, to say nothing of the luxuries of life, and the Major smiled grimly as he thought that at least his money would never furnish these for her.

Here his thoughts were interrupted by a knock at his library door.

"Come in," he said not very cordially and there was a swish of silken skirts, a faint odor of violets and Mary Dolman entered. The Major was surprised, but he was a gentleman and after one brief second of hesitation he came forward and extended his hand to his visitor.

She shook her head, "No," she said, "I wont compel you to do for politeness sake what inclination has never prompted you to do before. I know that I ought not to have come here but there was no other way.

"Katherine must not marry your son. It is your duty to prevent it."

"I've told him so myself," replied her host, "but he is young, obstinate and"—"Hot headed as his father was before him," interrupted his caller softly.

"Exactly, exactly," replied the Major who didn't feel half so sure that it would be an undesirable thing for Dick to marry as he had an hour before.

Mrs. Dolman was certainly a beautiful woman, and as her brilliant eyes were turned upon him his heart beat uncomfortably fast, and he began to wonder if she found him much changed from the James Winters she had once known. Added to these thoughts was a little feeling of pique that she should object to his son. Why Dick was a straight forward manly fellow, with lots of push, a college graduate, and would inherit—here his thoughts stopped, he had forgotten that he had decided to disinherit him, but after all any

girl who really loved him for himself alone might be glad to be his wife without the millions that would gild life for her.

"What objections have you to the match?" and now he drew a step nearer to his caller who had seated herself upon a couch on the further side of the room.

"How can you ask that?" she said hotly. "Do you suppose I am willing my daughter shall marry the son of the man who despises her mother?" The Major's head whirled. He forgot everything but the fact that here was the woman he had always loved, and he seated himself by her side and took her unresisting hand.

"Mary," he said softly, "I've always threatened Dick that if he married in a way to displease me that I would bring home a step-mother."

The hand in the Major's trembled but its owner made no reply, and the Major continued hesitatingly, "Mary I've always loved you, and now suppose—suppose I keep my promise, and we steal a march upon these disobedient children and punish them both by going to Parson Mason's and having him tie the knot as it should have been twenty-five years ago. There is no one to stand between us now, and don't you think you can care enough for the old fellow to atone to him for some of the years of happiness you have made him lose?" The proud head dropped lower and a flush stole over Mrs. Dolman's face, but she did not repulse the Major, as in some way his arm stole around her waist, and only ears sharpened by love could have heard the reply that made his face radiant, and caused him to urge a speedy termination of this astonishing courtship. "To-night? Marry you to-night." Mrs. Dolman lifted her head from his shoulder and stared at him aghast at the proposal.

"Yes, why not? Why should we wait for the gossips to get hold of it. We're both old enough to know our own minds, and if we don't marry, the first thing we know those two young idiots will get ahead of us, and they're no more fit to be married than the 'Babes in the Wood.' Why they're nothing but children themselves."

Mrs. Dolan agreed to this and as the Major alternately coaxed and pleaded consented at last to be married that evening.

* * *

It was dusk when Major Winter's touring car wheeled swiftly up to Mrs. Dolman's door. Fifteen minutes later both parties were as rapidly wheeling away down the road that led to the Rev. Mr. Mason's.

"I'm afraid we ought not to," said Mrs. Dolman, as her eyes anxiously scanned the increasing darkness for some curious person.

"Ought not to, my dear," said the happy Major tenderly. "It's our duty toward those young rascals. They'll be more like brother and sister and perhaps out grow their foolish idea." "Not if they are like their parents," replied the little woman.

"By Jove! another party ahead of us sure," said the Major as he stopped in front of the minister's door and helped Mrs. Dolman to alight.

"Just a moment," said the maid who opened the door in response to their ring. "Mister has another, but he's most through."

There was an expression of amusement and laughter on the Rev. Mr. Mason's face as the Major stated their errand. And even after the ceremony was performed and he had received a substantial check in payment for his services the look of amusement still remained.

"What made him look and act so strangely, James?" exclaimed the newly made Mrs. Winters as they wheeled slowly away from the house.

"I'm sure I don't know, unless he thought us a couple of fools, but as we're not of his opinion it doesn't matter in the least," replied the Major placidly, as he carefully arranged the lap robe and passed his disengaged arm about the waist of his bride.

By this time the moon was shining brightly, and the Major suggested that they prolong their ride as it was still early in the evening.

They found plenty of subjects for conversation, but before they had gone far their attention was attracted by a second automobile, which passed them at a furious rate of speed.

The Major leaned forward a little, his eyes fairly bulging from their sockets.

"Great Scott!" he cried hoarsely, as he gazed after the fast disappearing machine. "There go our children!"

Mrs. Winters clutched his arm, "They are running away," she gasped, "Oh, James follow them and put a stop to their marriage." "I'll do my best," cried the Major, "but they've got a confounded good start and it will be a long chase."

Major pushed the speed lever over to the limit and the automobile gave a sudden plunge forward and then a trail of dust following in its wake, it went down the hill at a pace that fairly made the couple hold their breath.

On, on speed both auto's, one mile, two, three, five, ten were passed and the Major was evidently gaining upon the leading vehicle.

"We'll have them yet," said the Major gleefully, "and I'll teach them to lead us such a chase as this."

His new made wife smiled faintly. Her nerves were wrought up to a pitch of excitement that prevented her seeing the absurdity of the situation.

"Oh!" the Major gave a start of surprise and his wife screamed with excitement.

Manifestly something had gone wrong, the leading automobile rushed aimlessly about for a second and then quickly tipped over, landing its occupants in a brush heap by the side of the road. The Major caught a glimpse of two white faces, one of them with blood streaks upon it as he whirled past.

"Oh, stop, please stop!" moaned his wife.

"I can't," said the Major huskily, "this damned machine with its ninety-seven different automatic fixin's has got beyond my control, and Satan himself couldn't stop it until it gets ready!"

Mrs. Winters began to sob. "Don't Mary," he urged. "Don't take on so dear. It breaks my heart to hear you."

"But the children!" she cried, "What will become of them? I'm afraid they are terribly injured. Oh, what shall we do?" and she wrung her hands despairingly.

"Keep cool the speed we're going can't last forever. We must stop sometime. Let me see, the road makes a sort of loop here and if I can manage to guide this devilish concern into that, we shall come out on the main road again a little back from where the accident to the children occurred."

The Major now bent all his energies toward turning into the desired road and finally succeeded in doing so, and in an incredibly short time they were back at the scene of the accident. Then to their amazement the motor suddenly quit and the vehicle stopped of itself.

The Major sprang from the carriage as soon as it came to a standstill and Dick who recognized him immediately threw one arm protectingly around Katherine while he stared at his father and cried defiantly, "You can't separate us now for we're married?"

"Very well sir, you know the consequences," replied the Major coolly, as he assisted his wife to alight. Half crying Katherine threw herself into her mother's arms and of course was wept over, kissed

and petted, while the Major laying his hand on Dick's arm said half affectionately, half sternly, "Well sir, I've been as good as my word. I said I'd put a stepmother over you and here she is! Allow me to present Mrs. Winters."

With Katherine still clinging to her that lady bowed graciously and extended her hand to Dick who took it mechanically while he murmured, "I wonder if I hurt my head in that smash-up?"

Katherine laughed merrily. "Oh, Dick, Dick!" she cried, "Can't you see that it is all right? Mamma has married her old love, and now everything will be lovely," and she fell to kissing her mother, while Dick now partly recovered from his astonishment grasped both the Major's and Mrs. Winters hand, and while he shook them heartily said earnestly, "You have my heartiest congratulations, and had I known of this earlier the accident might have been averted. You see," he added smilingly, "we thought you were after us and naturally tried to get out of your way."

"And so we were," cried the Major, "and would have had you, too, if that confounded machine hadn't got out of order! But it's all right now. Seeing I've married her mother I suppose I must forgive you for falling in love with Katherine," and he laid his hand on the girl's head as he said gently, "Only be good to him my dear, and make him as happy as your mother has me, and I shall ask nothing more."

Of course the wedding was a nine days' wonder, and their country neighbors commenting upon it said the "Widder Dolman knew which side her bread was buttered on, and had done well for herself and her daughter."

As for the Major and his wife they never regretted the hurried match that brought them so much happiness, while Dick and Katherine were equally content with the rule of the gentle "stepmother."



For Globe Girdling Purposes

THIS is the \$15,000, 30 h. p. Panhard in which Dr. E. E. Lehwess and seven assistants have started on an attempt to circum-motor the globe. The name of this very original Panhard made affair is the "Passe-partout," for what reason no one seems to know. Freely translated this means latch key or a passport. In the illustration Dr. Lehwess is shown at the wheel, the mechanic-in-chief is next and adjoining him is the chef. The lady back of the



doctor is his wife, who, however, prefers home to passe-partouting around the world and will not accompany him. The instigator of the trip is a British paper heretofore more famous for its pictures of notoriety loving females than for its devotion to automobiling.

No Occasion for Grief

If a scorcher meet a scorcher
Whizzing on the fly,
And a scorcher hit a scorcher
No one needs to cry.

The First Road Engine

By ANGUS SINCLAIR

THERE is a popular belief that the steam engine was first applied to land transportation by using the crude tram roads used in England for hauling coal from the pits to shipping wharves, but that view is not correct. Those who first conceived the idea of using the steam engine for land locomotion expected to use common roads for their carriages.

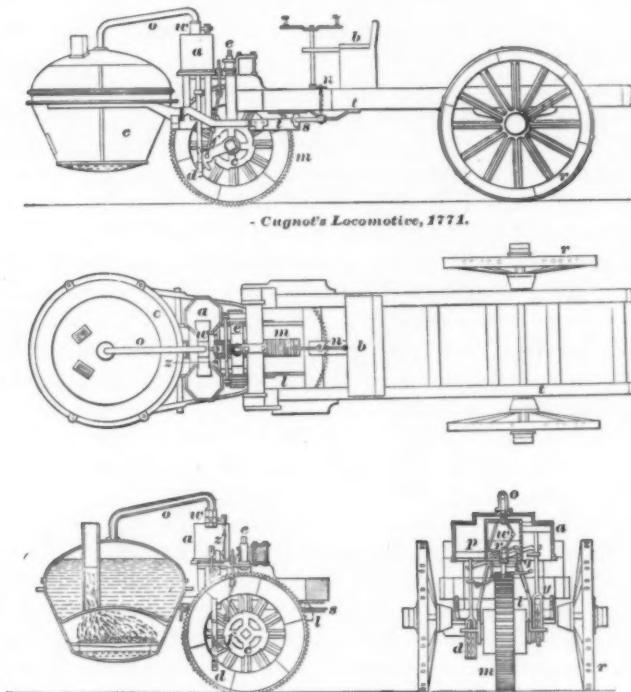
Many of the most important inventions employed for industrious purposes originated in attempts to improve the weapons and appliances used in warfare. The development of the art of steel making was fostered during ages of general ignorance through the demand for sword blades that would endure the hardest clash of battle without breaking; skill in working cast iron was fostered and developed in the casting of cannon, and the art of having these taught mechanics how to bore cylinders that were practically round and suitable for the movement of a steam tight piston. Skilful and artistic blacksmithing were cultivated by the forging of weapons and the construction of armour. The manipulation of metals and the mixing of alloys for military purposes laid the foundation of metallurgical science which afterwards achieved unparalleled triumphs in the arts of peace.

It seemed only by a mere accident that military enterprise failed to make the high pressure steam engine the first success for land transportation.

In the year 1769, when Watt was trying to improve on Newcomen's atmospheric engine by using a separate condenser to prevent the loss of heat that resulted from condensing the steam every stroke in the main cylinder, Nicholas Joseph Cugnot designed and had built in Paris a steam carriage which he supposed could be used as a gun carriage. The carriage was tried in the presence of the Duc de Choiseul, Minister of War, and other influential courtiers of the French government. Like most first attempts this steam engine was not a success, but the inventor was encouraged to try again and he produced a second engine which is still preserved in the Conservatoire des Arts et Metiers, Paris, a museum where a great many interesting engineering inventions and curiosities are preserved, some of them being of particular interest to Americans. I have examined the engine very carefully several times and consider that it was a wonderfully well designed and substantially built motor, much supe-

rior to the first high pressure engine built in England thirty years afterwards.

Cugnot's engine, shown in the annexed engravings, is a tricycle with a heavy frame consisting of two strong wooden beams set parallel and extending from end to end to which the wheels and running gear are secured in a most substantial manner. The single wheel is in front and carries the engine and boiler. It has blocks



on the periphery for the purpose of biting the ground and preventing slipping—a very necessary arrangement for the adhesion would not be sufficient to hold down much tractive force. The single wheel is turned by two single acting engines, one on each side, which operate ratchets that convert the reciprocating motion of the pistons into rotary motion. This arrangement was tried by several improvers of pioneer steam engines afterwards before they realized that the crank,

whose action in connection with the turning lathe is as old as civilization, was the simplest way to convert to and fro motion into circular motion. To me the boiler seems to be the most defective part of the apparatus. It is made in the form of the cooking caldrons used in the kitchens of feudal castles in olden times. As may be noted the vessel is a section of truncated cone made of copper sheets riveted together. At the bottom is a small furnace which was undoubtedly too small to generate steam for more than a few minutes at a time when the engine was working, and this shortcoming doubtless demonstrated that the motor could not perform the work it was intended for.

The wheels are of the kind that were used for field artillery in the Seventeenth century and are very strong, as might be expected, and the whole of the running gear and engine connections were evidently made to endure rough usage. The pioneer locomotives and automobiles or road steam carriages built thirty-five years afterwards in Great Britain caused great annoyance, expense and delay through the parts being too weak; and failures happened so frequently that many people were convinced that steam carriages for common roads were impracticable, with the result that the introduction of steam into land transportation was delayed for years; but there was no fear of Cugnot's carriage breaking down on account of structural weakness.

The political troubles that were brewing in France about the time Cugnot's carriage was tried gave the military engineer something to do which was considered more important than the work of experimenting with a steam engine. Cugnot lived till 1804 and saw other forms of steam engines made a commercial success.

So far as the mechanical part was concerned Cugnot's high pressure steam engine possessed all the valuable elements of high pressure steam engines that were afterwards made successful by others. Cugnot, like our own Oliver Evans, worked out the problem of improving the Newcomen atmospheric engine into a high pressure steam engine. Had Cugnot been an Englishman he would to-day be credited with being the inventor of the high pressure steam engine. But having been a Frenchman, encyclopedia writers ignore his name while recounting the history of the steam engine. In spite of the very important engineering work which he began, Cugnot's name is not to be found in any American encyclopedia.

The faster a man's pace the sooner misfortune overtakes him.

“Twinkle, Twinkle, Little Star”

(Autoist's Version.)

“*Twinkle, twinkle, little star*”—
I'll “hitch my wagon” to you—
Try you on my motor-car,
If you don't mind—now *do* you?

“*How I wonder what you are.*”
And all the other fixings,—
Placards white, etcetera:
Municipal restrictions.

“*Up above the world so high,*”
No “copper's” eye to trace us—
Fournier's record we'll defy
And beat old winged Pegasus.

“*Like a diamond in the sky*”
Shine out;—though blinded with thee
I'll not steer the thing awry,
So falter not, I prithee.

“*When the blazing sun is set,*”
And there's a chance to try it,
Round the moon we'll *scorch*, you bet!
And when we're fined deny it.

“*When the grass with dew is wet,*”
And swift the traveler hies him
From the shades that fear beget
And spies that may surprise him.

“*Then you show your little light,*”
Among the spheres to guide us,
Proving, at such giddy height,
A real *Achates-Fidus*.

“*Twinkle, twinkle, all the night.*”
With joy your twinkles fill me.
But dread thought!—what awful plight!—
If here my auto spill me.

A. L.

Two for Twenty-Two Thousand and Vienna

M. A. P. tells this story concerning the sudden conversion of an American millionaire to automobilism. "How much?" asked the millionaire, pointing to a Frenchman's car in the Promenade des Anglais at Nice. "Sixty thousand francs," was the reply. "I will take it," said the American. "I have another car," the Frenchman remarked. "How much?" "Fifty thousand francs." "I will take that, too; and now I want a chauffeur. I have never been on one of these machines yet." The Frenchman thought his own man might like to enter the American's employ. "Then send him with the best one of the two vehicles to my hotel in an hour." At the appointed time the newly bought car was at the hotel, and the American came out to meet it carrying a small handbag. "Where to?" asked the chauffeur. "Vienna," was the reply, and without a word the car was turned Viennwards.

When Father Tries

Oh, there's sulphur in the kitchen
And there's brimstone in the hall,
While oaths, loud and portentous,
Ricochet from every wall;
The women walk on tiptoe
Lest they feel effects of ire,
For father is attempting
To repair a punctured tire!

Oh, the baby's gone to gasping
And each breath seems like its last,
For it's swallowed half the stickum
And its insides are glued fast;
Little Johnny's lost the rubber
In his wish to help the sire
In his wild, misspent endeavor
To repair a punctured tire!

Oh, the gasoline for cleaning
Has exploded with a flash,
And the tub, for tracing bubbles,
Has tipped over with a splash;
Hush! 'Tis finished! Now he's pumping—
"Failed to stick!" and through the mire
To the tire man now goes father
With his still deflated tire.

It May Happen

By JEAN DES BOISÉNEY

“GENTLEMEN and fellow rough road riders,” said the presiding officer in his opening address at the annual convention of the Almagamated Association of Aggressive Automobilists, I have to place before you for your consideration and action a communication of some importance which has been received from our friends the enemy, the Proud and Protective Order of Pedestrians, composed, I believe, of people who still have not seen the error of their ways in seeking muscular rather than motor power for transportation purposes.

“As you will remember, gentlemen, we passed a law at our last annual meeting prohibiting automobilists from running down foot passengers or even scorching by them close enough to warrant apprehension. I am pleased to state that it has been most zealously carried out! This petition is the result! Humble and tearful in tone, actually abject in places, it respectfully asks that we repeal the law and let things be again as they were in the old days when men took their lives in their hands when they ventured out on foot!”

“What is the matter with the law, Mr. President?” asked the member from Coxsackie in amazement.

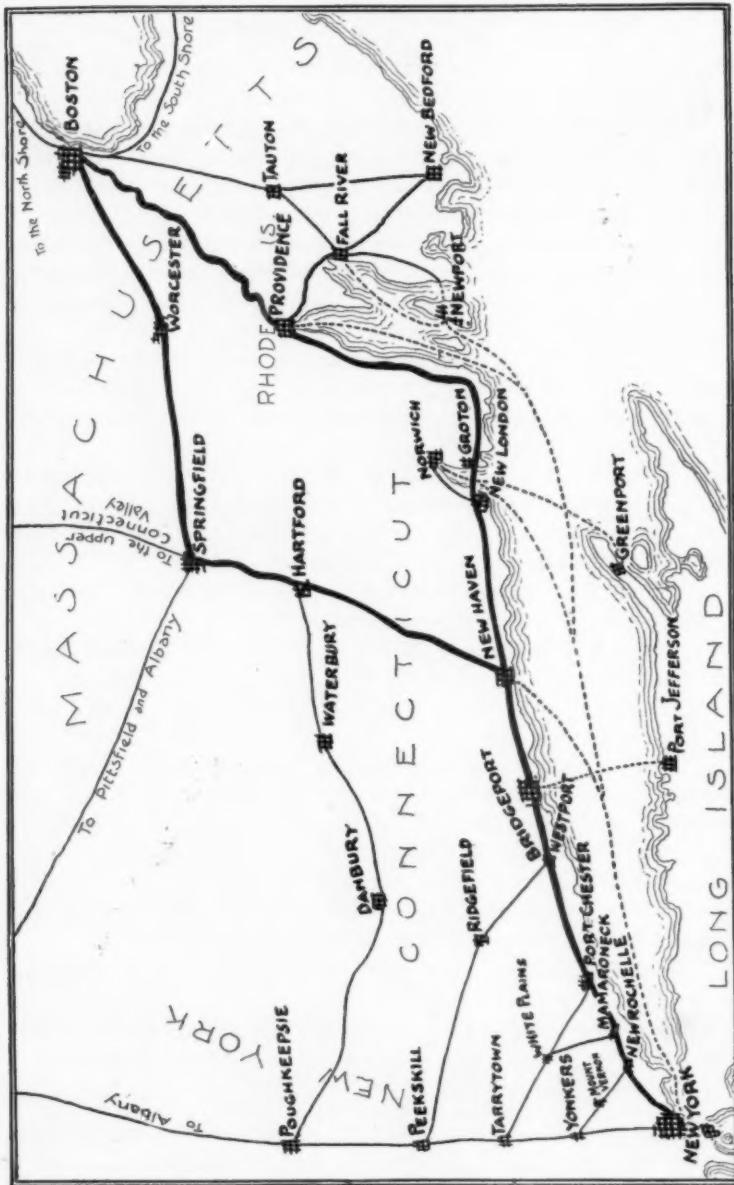
“Why, everything in the world, it seems! The petition claims that the alarming increase in divorces, riots, homicide and crime of all kinds during the past year is directly attributable to this law! To quote from the preamble:

“The wicked passions and bestial tempers inherent in man found safe and lawful outlet in damning and denouncing, cursing and condemning, vituperating and vilifying automobilists. The inability of pedestrians to make enraged outcry against automobilists dams this channel, and the passions and tempers thus pent up come in time to flood private and public life, sweeping away peace and happiness and leaving woe and discord behind to mark its path.”

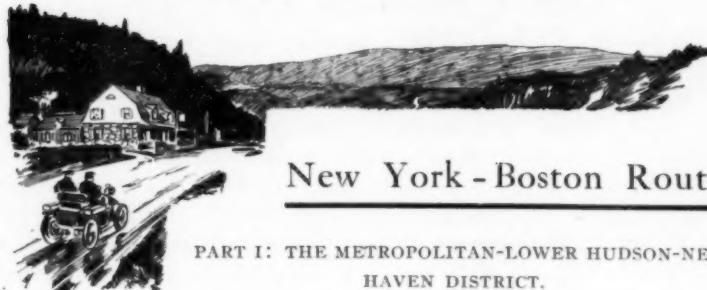
“Merciful heavens!” shuddered the member from Oskaloosa, “I move to repeal the law.”

“The motion is unanimously carried!” announced the president after balloting. “Gentlemen, the vote shows tenderness and humanity and does the automobilist proud.”

Some people never accomplish anything in automobilism because they have too much patience with themselves.



Touring Department



New York - Boston Route

PART I: THE METROPOLITAN-LOWER HUDSON-NEW HAVEN DISTRICT.

OF the various ways out of New York to the North and East, few are continuous good thoroughfares for automobiles; and concerning these opinions will differ. When, therefore, one comes to the task of naming a certain definite route in preference to all the rest, he is bound to provide that which is not only worthy of itself but well-placed with respect to the others. So the base-line of the first stage of the present association of tours (not one but many in one), is established well up, with a recognition of the good roads leading to or past it, instead of following one chosen exit and its connections into the country.

Fordham Road and Pelham avenue form a continuous, though at times a "jointed" thoroughfare east and northeast from the Harlem River at Fordham Landing until near to New Rochelle on the Sound. Either one or the other is crossed by every through route into the northern suburbs, and together they are a complete connection between the Albany Road and the Boston Road, almost entirely within the limits of Greater New York. Beginning at the water's edge close by the little railroad station, Fordham Road comes up immediately to (a) Sedgwick avenue, just below Webb's Academy and Shipbuilders' Home, intersecting there the New York-Albany route (No. 1 of this series, published May), which leads up past this building, on to Kingsbridge, Yonkers and the north. Within five minutes' of riding it cuts across a number of streets and avenues, among them (b) Aqueduct avenue, from the upper West Side, via Washington Bridge; (c) Jerome avenue, from Central Park and above, via Central Bridge, and (d) Webster avenue and its straightaway connections from lower Harlem points.

This long cross-road is all clear except that for the space of one

or two blocks, One Hundred and Eighty-ninth street comes into the same thoroughfare, and for the moment usurps its identity in so far as lamp-post signs are concerned. Here the first impulse (particularly if going eastward at speed), is to continue with One Hundred and Eighty-ninth street. Nevertheless, keep to the left, in which direction a special large sign points the way to the Zoological Park. This will bring up and into Pelham avenue, over the lowered tracks of the Harlem railroad (Fordham station), and under the elevated railway. Immediately to the left are the buildings and grounds of St. John's College, while straight ahead the outlines of Bronx Park appear. Continue to the Park and cross without break or turn, noticing at once as you go out a roadway leading diagonally off to the left, not so wide or as pretentious as the one which opens up even broader and better straight ahead.

This point—officially Bronxdale, in reality not much of anything—is a parting of the ways for about fifteen miles. The diagonal road to the left, the straighter and shorter of the two, is the Boston Post Road, the all-inland way to New Rochelle; the other, the more modern, parkway-and-shore (Pelham Bridge) route to the same place. If you wish to exchange the town for the country at once, and to throw directions to the winds for awhile, take the Boston Road, which is fair-to-good going. In this event you are all right into Main street, New Rochelle, except for the single care to keep right ahead where the double car tracks come over from Mount Vernon into your road.

The outside and more picturesque road is straight ahead out of Bronx Park, although it gradually bends eastward and brings up into Pelham Bay Park, thence by a broad turn to the bridge over East Chester Bay. The Department of Parks has this section now in hand, and there may possibly be some little interruption in getting through, but nowhere a stoppage. Across the bridge (Bartow station over to the left), the road to City Island leads east. Do not take this, but finish Pelham Bay Park on the same road, passing Hunter's Island and going over the Greater New York line into Pelham Manor. All the summer long, the nearby waters are alive with pleasure craft. It is now a stretch of rock-bound coast-line, leading past the entrance to Traver's Island, the country home of the New York Athletic Club. The Pelham Road finally gives way to Center avenue, which take, by a turn left, into Main street, New Rochelle.



In an earlier paragraph it was shown how (a) Sedgwick avenue, (b) Aqueduct avenue, (c) Jerome avenue, and (d) Webster avenue—all through connections from Manhattan—cross the Fordham Road. Likewise, its other self, Pelham avenue, intersects the (e) Boston Post Road which, with a stretch of Third avenue, reaches back to the Harlem River. A little farther on, the (f) Williamsbridge Road crosses nearly at right angles, connecting with Williamsbridge, Westchester and intermediate points. Finally the whole Westchester district (including Unionport and Fort Schuyler), is linked with Pelham Bridge Road by (g) the Eastern Boulevard and its connections. These last connecting routes were not listed with the first series for the reason that one would not ordinarily take any of them out from Manhattan, since the facilities for reaching them from below are inferior. However, there are many automobilists living in Westchester and thereabouts who, by starting from their homes, avoid the cross sections below and enter the Pelham district on equal terms with those who come up on the Fordham Road. The same thoroughfare across the upper city—our original base-line—sooner or later accommodates them all.

Once in New Rochelle, by either the Boston Road or by Pelham Road and Center avenue, go straight through the city on Main street to Larchmont and Mamaroneck. Entering Mamaroneck, turn right at the fountain, immediately over a short stone bridge and up an easy grade, again clear of car tracks. Two or three miles out, there is a fork where one sign-board points left for the "Old Post Road," and right for the "Boston Post Road," the latter of which take (down-grade) toward Rye. It is possible—and on the whole best—to cut Rye out entirely. This is done by another right turn at the edge of the town, going uphill and around; but if you do down, take Purdy avenue out. In either case, cross over the railroad tracks immediately above Rye, at the same point where the electric cars out from Purdy street turn back into the country. The highway, however, continues straight on, entering Portchester (twenty-



eight miles) by a left bend under the railroad tracks and up into the center of the city. All the way it is splendid countryside, with ever-increasing promise of open country beyond.

Though direct from New Rochelle, the road has been winding and rolling. The going is good, except that here and there a stretch of macadam has been improperly put down with the result that bushels of small, sharp stones work loose. Brick pavements are more or less in evidence, particularly between car tracks, even where there is macadam alongside. For little of the time in sight of the water, it is still plainly a shore road, now and then a piece of it cut through solid rock. Of cross-roads there are legion—many of them better posted than the main thoroughfare. Pay no attention to them, however, except, perhaps, as a means of "placing" other points and routes. Likewise ignore the directions the street cars take.

The building of the Mutual Trust Company of Westchester stands at the parting of the ways in Portchester, with the road to the Connecticut line leading out to the right of this building. The Byram River, a small stream—not only the interstate boundary but the end of the Westchester road system—is soon crossed. A half mile beyond Portchester, take the right fork toward Greenwich (left fork leads inland to Glenville). There is one bad spot on the way to Greenwich where the snow and ice from the rocks above come down and carry away the surface improvements, closing the road altogether at times in winter. This stretch is soon to be put in permanently good shape, however.

It is straight on to Greenwich, through the upper part of the village, down "Put's Hill," so-called in honor of General Israel Putnam who, on February 26, 1779, cut off from his own soldiers and pursued by British cavalry, galloped down its steep side to freedom. This hill—the worse one on the run—has been graded down at the top and built up at the bottom within recent years, and can now be taken by most automobiles either way. East-bound, one has its grade in his favor anyhow; and if there is any apprehension of difficulty the other way, a short detour nearer the shore will avoid it altogether. Take either the direct road to Mianus or else turn right to Cos Cob and come up to Mianus alongside Cos Cob harbor. The latter is the most attractive of the two and is but a short distance farther. Cross Mianus bridge, go up hill (good dirt roads in place of macadam), over good roads direct to Stamford, thirty-six miles. Enter by East Main street, and at the very center of the city pass over into West Main street, which keeps until it brings up to the



Noroton River. In so doing you bend through the eastern section of Stamford, cross under the railroad tracks and pass many fine country homes.

After crossing the Noroton River, it is straightaway to the Norwalk River, through Darien and Norwalk. South Norwalk, the better-known railroad point, is not touched. The roads—principally Connecticut avenue, as this particular portion of the Boston Post Road is locally called—though fair going, are not so good as the ones left behind. There is an exceptionally fine view just before entering Nor-

walk. From the last hill on Connecticut avenue (its passing none too good), you look down upon this trim New England city, also to South Norwalk below, with the Sound and the Long Island shore in the farther distance. The actual entrance into Norwalk is perfect going and one to be remembered. Connecticut avenue brings you from the country into West avenue, which follow into Wall street and (by right turn) over the arch across the Norwalk River. Once across, bend left at once on East avenue, only to turn right in two or three minutes into Westport avenue, straight to Westport, over fair-to-good country roads. This town, of scarcely any importance or interest in itself, is yet a sort of hub for local routes, besides being the point where the connecting road from the Hudson (Peekskill its western end) comes into the route along the shore.

Go straight over the bridge at Westport and on to Southport. Here the road makes a right turn, goes under the railroad, running more or less parallel with it to Fairfield, through which it makes a broad bend. One is by this time on Fairfield avenue which (after another crossing under the railroad near the western end of the track elevation) leads into the center of Bridgeport, across Main street and down to the New Haven depot. For the past twenty miles the roads have been mostly of dirt, in fair condition, about equal for automobile riding to the average of country macadam. Small signs, put up by an enterprising dry goods house, point the way.

Within a few months the vicinity of the



depot in Bridgeport will be greatly changed, and a handsome stone viaduct will carry the road over from the foot of Fairfield avenue into Stratford avenue, then more clearly even than now, one thoroughfare except in name. At the present time, cross the many tracks at grade, go over the bridge and straight ahead onto Stratford avenue. The railroad tracks are to the left and the Sound to the right. After about three miles, the road turns left, which follow up to but not into Stratford. Instead, turn right at the fountain and go on five miles or so over somewhat poorer roads to Milford, crossing the Housatonic River in so doing.

A system of street railways connects Bridgeport with New Haven, and the signs of these termini are boldly displayed on each car. There is an element of temptation in this for the unacquainted tourist who may be weary of watching where he is going. Nevertheless it would be well-nigh impossible to find more trouble with less difficulty than to yield. Though at times on the highway, these lines take in all the shore resorts, going over trestles, through woods and around every kind of obstruction native to the district. Indeed, in case of doubt, the safer proposition is to go away from rather than with the trolley.

Coming straight into Milford, the highway divides on either side of a narrow street park. Once in the town, there is another parting of the ways, which determines one's course for the rest of the way to New Haven. The least often used and the roughest, though a perfectly straight road, is reached by passing under the railroad tracks and up to the Milford turnpike. This leads overland direct into Congress avenue, New Haven, by a line shorter even than the railroad mileage. However, the shore road, with its added distance and many crooks and turns, is most universally used by automobile tourists, to whom miles are of less moment than road conditions. To reach the shore road, do not cross the railroad tracks but, when down town in Milford, turn right, up to the Memorial Bridge (the names of distinguished citizens cut in stone blocks), uphill and straight out. Again you go for a short distance with the trolley line, but leave it where it turns off into the country. Farther on, where the condition and appearance of two forking roads would confuse, a large sign directs left for New Haven. Woodmont village—a collection of small houses—nestles close to the shore, about three miles out from Milford. The railroad station is off to the left, but in sight. Avoid going down into Woodmont

village by making a bend to the left. From this point the road into West Haven is very near the waters, and one cannot miss it if he will only hold to the shore road through all of its windings to Savin Rock, West Haven's Sound resort.

Enter Savin Rock by the road which leads upward between the two largest hotels and bends around into Savin avenue. From here into New Haven the roads suitable for automobiles are far from straight, and none too good at best. Take Savin avenue to Main street, to First avenue, to Elm street. Follow Elm street until it brings up into Kimberly avenue. The latter takes you over a road (largely a built-up road), over the lowlands of the Sound. Keep Kimberly avenue until it comes into Howard avenue just at the crossing of the bridge over the New Haven tracks. Keep Howard avenue into Congress avenue (the New Haven County Hospital on the northeast corner); then Congress avenue direct into Church street and up Church to the corner of Chapel street and the center of the city. As an alternative, keep the shore through and beyond Savin Rock, around to First avenue, into Elm street and on as before. From Elm street the route is almost entirely alongside street car tracks and over variously paved streets. Nevertheless it is the best way to reach New Haven from the western end. It is one hard day's run, or two easy days tour from New York or lower Hudson points. The distance is eighty miles, but rather more than less. Stamford, (thirty-six miles), Norwalk (fifty-four miles) and Bridgeport (sixty-two miles) are cities with suitable accommodations for men and machines en route.

Looking Toward Boston

HELPS IN PLANNING THE EASTERN TRIP

THE outline map of the routes from New York to Boston in this issue show the two principal all-highway trunk lines between the two cities, as well as the main connections from the lower Hudson country and Long Island Sound. It will readily be seen from this that one who is starting eastward from Poughkeepsie or below may do so without coming to New York. This is an item of useful interest not only to automobilists living in the northern suburbs, but also to others wishing to change over from the Albany Road to the Boston Road or vice versa, bridging over, as it were, the Metropol-

itan district. Yonkers, Tarrytown, White Plains and their environs are at least on equal terms with the metropolis in this respect, since it is possible to go from any one of them across to New Rochelle, Mamaroneck or Portchester over good roads; and from Tarrytown the distance is even less.

From Peekskill across to Bridgeport is about fifty-four miles, and fair-to-good going, through Yorktown, Somers Center and Purdy (N. Y.), Ridgefield and Westport (Conn.). This is a safe enough trip in case one wishes to start from the Peekskill district, but it would not ordinarily be made an object in itself. One notable feature of this cross-route is that it really ends, not at Bridgeport, but at Westport; but as usage has established Westport as a way station rather than as a terminus, less confusion in terms will result from allowing it so to stand—especially since one is necessarily brought by it into the shore road.

The overland run from Poughkeepsie connects with the Hartford-Springfield-Worcester route only, since it enters Connecticut above New Haven. It is about eighty miles from Poughkeepsie to Hartford, and the route is through Hopewell and Pawling (N. Y.), Danbury, Newtown, Naugatuck, Waterbury and New Britain, Conn. It is a good day's run in fair weather, but one must take his chances on supplies. This is the end of advantageous routes from the west entering below Springfield—in itself a big hub of routes with spokes reaching to the Upper Hudson and Albany. These belong, however, to another series, the Berkshire connections to the east.

Long Island offers two connections toward Boston, by boats which run, none too frequently, between (1) Port Jefferson and Bridgeport and (2) between Greenport and New London. Port Jefferson is a trifle less than forty miles from College Point (ferry from Ninety-ninth street, New York). Greenport is 120 miles or so, being situated near the end of the island's North Shore road. It is better reached, however, via Patchogue and Moriches to Riverhead, thence east by north to Greenport. This makes the shortest of all routes to Boston.

It may sometimes happen that one may wish to use his automobile in and around Boston, or on the North or South shore, without riding the entire distance from New York, or going to the trouble of sending it as a separate shipment. The same is apt to be the case with people having summer homes at Narragansett Pier, Newport, Buzzard's Bay, Martha's Vineyard and round about. Not

very long ago it was different, but now one may take his machine nearly anywhere his handbag may go, in so far as steamboat lines are concerned. The problem with the railroad is different, but an automobile may be run aboard almost any kind of watercraft above the grade of hand ferryboat. There is no trouble except to run it off again; and the revenue has grown to be considerable. So the clerks in the steamboat ticket offices and the captains no longer shake their heads when you timidly admit having an automobile in your equipment; they quote you the stated charge therefor as a matter of course. The lines controlled by the N. Y. N. H. & H. R. R. (Marine District) have established a charge of \$8.10 for carrying vehicles seating two persons from New York to Fall River, Providence or Newport. For vehicles seating four, the charge is raised to \$10.80; more than four, it is \$13.60. Rates to other points will be quoted on application in person or by letter to Pier 19, North River. It is a great convenience to know what you may expect before starting out. The coöperation of a steamboat, like a gun in old-time Texas, is needed only at long intervals—and then badly!

REFERENCE TABLE OF DISTANCES.

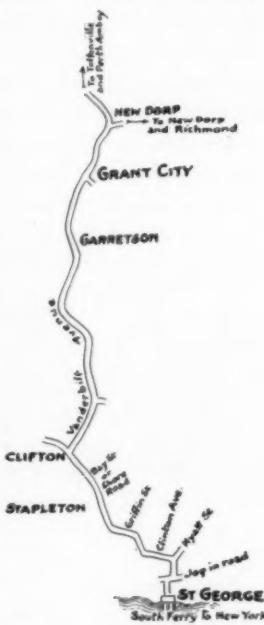
1. New York to Boston (a) shore line, via New Haven, New London and Providence, 248 miles; (b) Springfield line, via New Haven, Hartford, Springfield and Worcester, 260 miles; (c) across Long Island, then shore line, 236 miles, plus the sail across the Sound.
2. Connecting lines from the Lower Hudson (a) Yonkers-New Rochelle, 10 miles; (b) Tarrytown-Mamaroneck, 14 miles; (c) Tarrytown-Portchester, 16 miles; (d) Peekskill-Bridgeport, 54 miles; (e) Poughkeepsie-Hartford, 80 miles.
3. Sound Steamer Landing to Boston (a) New London-Boston, 110 miles; (b) Providence-Boston, 45 miles; (c) Fall River-Boston, 50 miles; (d) New Bedford-Boston, 56 miles; (e) Newport-Boston, 65 miles.

The AUTOMOBILE MAGAZINE, and particularly the compiler of its tours, will welcome either corrections in work already done or suggestions having in mind better ways and means of accomplishing the same ends. In due time, these trips and their illustrations will be issued in separate pamphlet form for the convenience of subscribers; and not only is absolute accuracy desired, but differences in viewpoint and opinion will help to shape the final result.

The Place of the Mile Record Trial

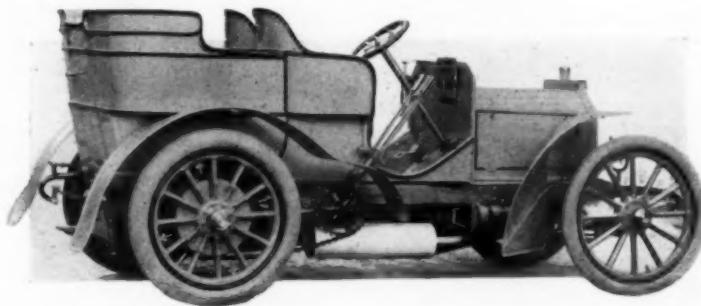
HERE is no single section in the Metropolitan Riding District better suited for short distance speed contests for automobiles than the eastern shore of Staten Island. It is one stretch of good and level roads practically from St. George to Tottenville, 16 miles or so through the whole length of the island. The towns, though close together, are small—mere specks on any road map. It would be possible to stop an organized run at almost any point en route and pull off an impromptu speed contest. So much better, then, for anticipated new records, when special arrangements have been made with that definite end in view.

Grant City is of itself a small collection of houses about six miles from the ferry landing at St. George, and less than a mile this side of New Dorp, the better known point. To reach it by train, take the Staten Island Rapid Transit direct to Grant City station. To ride there, cross over from South Ferry to St. George, leaving the ferry slip by the left exit, and go straight up to where the way ahead is half blocked by the irregularity of the first cross streets. Bend right just enough to get around this jog in what ought to be a straight road and go ahead a single block, Hyatt street, then turn left. This is Central avenue, which leads downhill for two or three blocks to Tompkinsville. Turn right, up a single block (Arietta street) then left (Griffin street) direct into Bay street, or the Shore road. Follow this through Stapleton and toward Clifton. But just before Clifton, turn right on a splendid macadam road—Vanderbilt avenue—direct to Grant City and New Dorp. It will be necessary to keep a lookout for Vanderbilt avenue for, although the principal thoroughfare on the island, it is unmarked (save for its perfectly macadamized entrance) to this day.



The New Vanderbilt Mercedes

THIS is the vehicle that Vanderbilt bought and with it vanquished Rothschild. Equipped for touring and driven by a fifty-five horse power motor the weight of the vehicle has been kept down to close to 2,000 pounds, being a marvel of power, strength, lightness. The builders, the Daimler Company, Cannstadt, Germany, received the order for the carriage early in December and turned the completed vehicle over to William K. Vanderbilt, Jr., late in March. The contract was given under a guarantee from the makers that the vehicle should show a mile in 53 seconds or better. Evidently this must have been done since Mr. Vanderbilt accepted the vehicle and has himself sent it along five-eighths of a mile in 32 2-5 seconds. In



view of the perfection of the vehicle and the fancy prices alleged to have been paid for other high speed cars the announced price of this one, \$10,000, cannot be said to be exorbitant.

Warning to Beginners

Don't harass the nerves of your motor;
If you do, you are likely to learn
Why *It* is a *She*, unexpected:
For, though only an auto, she'll burn
To have her revenge—and her actions
Will induce you to earnestly yearn
(With oaths that are pure mediæval),
To have died ere you caused her to turn!

Speed and Perfection

By R. F. COLLINS

AUTOMOBILISM in France has been reared in an atmosphere of racing, and has now reached a stage of development when some people think that the new vehicle can dispense with speed work altogether. As the pleasure carriage is regarded as one of the highest and most useful achievements of modern engineering skill, so the racing automobile is looked upon as a Juggernaut seeking whom it may destroy, and is kept in subjection by timid legislators who pretend to fear that otherwise it might break loose and carry destruction through the length and breadth of the land.

Thus the powerful spaced-devouring machine is encountering deadly opposition from European governments, who have already thrown Continental automobilism into consternation by the prohibition of the Nice-Abazia race, and now hesitate about giving sanction for the other big racing events that had been planned to be held during the present year. If this antagonism continues it will produce a very doubtful outlook for the sport, and be no less unsatisfactory for the industry, since the two are so closely allied that there is very little chance of one making much progress without the other doing so.

Even here the people who legislate pretend to believe that racing is merely the sport of wealthy vehicle owners and they say that having already served its purpose as a means of giving a vogue to the motor vehicle, it can now be conveniently suppressed. If none but owners took part in races there might be some plausibility in this argument. But the strongest supporters of racing are the makers themselves who find it an invaluable means of testing the machinery of a vehicle, and the rivalry which is provoked by these competitions has resulted in far more progress being made in mechanical design than could possibly have been achieved without them. If it were not for this perpetual striving after speed the French automobile would never have reached its present stage of relative perfection.

The most convincing evidence of this utility of racing is the big advance which marks the construction of automobiles with each important event they enter. Nothing is more curious or more instructive than the decided increase in power and reliability which have coincided with every great race. The experience gained in each long

distance speed contest is invaluable to the manufacturer who finds therein many hints for improving his motors and propelling machinery. Then by a careful selection of the most suitable devices, often in imitation of his more successful competitors, he evolves types of carriages which are necessarily the survival of the fittest. Since the time, not so very many years ago, when makers regarded six horse power as the highest that could be safely employed in a racing vehicle, the power has been steadily and consistently increasing until carriages of the gasoline-electric type were built up to 100



Stead's 40 h. p. Mercedes, winner La Turbie hill climb

horse power, while the strict gasoline carriages were frequently fitted with motors of 75 horse power.

It was then seen that something more than power was needed to secure the maximum of speed, for with an augmentation of power came an increase of weight which not only absorbed a good deal of energy but gave rise to serious difficulties in connection with the pneumatic tires. Weight must therefore be kept down if the vehicle is to improve in efficiency, and the new racing rules limiting the extreme weight of all competing vehicles to 2,200 pounds has set makers a very interesting problem of how to get the maximum of

power into such vehicles. The result has been that there have been evolved entirely new types of automobiles which mark another big advance in construction. This is seen in the new types here while the powers are the same as, and in some cases less than, in the vehicles which took part in the Paris-Berlin event; the new vehicles have nevertheless proven themselves considerably faster than their predecessors.

Despite all of this the opponent of racing can see nothing advantageous in the speed of an automobile. He argues that the pleasure carriage has no need to travel fast, and that any legislation which may prevent excessive speed is, therefore, a distinct advantage. He overlooks the fact that without speed there can be no efficiency, or rather no perfection. Speed implies a combination of power, lightness, strength and reliability, as well as care in construction, and these qualities are just as essential to the touring carriage as to the racing machine. There is no necessity for the pleasure carriage to be unduly fast, but if it is to make any real progress it must certainly possess the other advantages, which can only be given to it by the experience gained in racing.

Look at the vehicles that were sent down to Nice in hopes of a race to Abbazia. Can it be for a moment suggested that they are mere mechanical monstrosities built solely for speed and possessing none of the requirements of the tourist? Certainly not. The new Mercedes shown herewith is far ahead of anything turned out in previous years. Not only is this true in point of speed, but more particularly in simplicity and reliability and noiselessness of running. By the employment of new mechanical devices this big four cylindered forty horse power vehicle is as silent as an electric carriage. You have only to change the carriage body and affix a less powerful motor of identically the same type to have an ideal touring automobile.

If the automobile is to reach perfection racing cannot be suppressed. As it is now automobiling is certainly passing through a very awkward period, but the industry is so powerful, and the public are so much in favor of racing, that European governments can hardly fail to take a saner view of things and relax their present antagonistic demeanor.

Paris, May 5.

Generally the better satisfied a man is with himself, the less satisfied he is with the rest of automobiling.

The London Show

By A. F. SINCLAIR

THE LONDON Exhibition, under the auspices of the Automobile Club of Great Britain and Ireland, held in the Agricultural Hall, was a splendid show of modern automotors, and is claimed to have been the finest ever held out of France, and in some respects not a whit inferior to the last Paris exhibition.



Whether viewed as an aggregation of vehicles and accessories, as a spectacle, from the amount of business transacted, or from an attendance point of view, the same story has to be told, and not the least important feature of its success was the very great educative influence which it must have exercised.

To enable the reader to form some conception of the extent of the exhibition the following particulars will be of service. In the first place a word or two about the hall in which the show was held. The Agricultural Hall takes its name from being the London show place of the Royal Agricultural Society, and is made use of for the exhibition of fat stock at different seasons of the year. It is a hall about 160 yards long by 85 yards wide. All

around the sides and ends, about 18 feet from the floor, and an equal distance from the eves, there is a powerfully constructed gallery about 42 feet wide.

The floors of the two halls were occupied with cars principally, while the arcade and gallery housed accessories, parts, and clothing. In the case of previous shows held in this building a space in the middle of the large hall had been set aside for trial runs, but the demand for space was too great, and the greater value of the center for show purposes was too clearly recognized to permit of the practice being continued, and no regret was expressed at its absence. Clatter and dust were reduced.

Altogether, there were about 280 exhibitors, an increase of quite a hundred on last year, the number of cars on view being close on three hundred. All the usual shapes were on view, but none approached the tonneau in numbers, although the phaeton made a fairly good showing. The electric vehicles exhibited the most conservatism in design, great disinclination evidently being felt by the makers to leaving the accepted form of the horse-drawn vehicles. While there was, of course, a very large preponderance, a gratifying preponderance indeed, of British built cars, American, Belgian, French, Italian and German cars were also shown in considerable numbers, the Americans being conspicuous not only from their distinctive design, but from the prominence of their advertisements.

A highly satisfactory feature of the show from the British point of view, was the position taken by the home firms engaged in the automobile industry. There were distinct evidences of the great strides made by British makers, and it is no exaggeration to say that home-built cars compared favorably with the best foreign makes shown, while on the question of color, as has already been said, their absence of gaudy tints commended them to the quieter tastes of British purchasers. Another satisfactory feature was the large addition to the number of British exhibitors.

A large amount of business was transacted, and it has been estimated that sales to the amount of £4,000,000 were made during the week, while one firm is said to have booked orders to the value of a quarter of a million sterling; sufficient to keep their works employed, at the present rate of output, till next December twelvemonth.

He that rideth with the careful man shall be safe; but the companion of a speed-worshipper shall be destroyed, maybe.

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Malcolm Webster Ford

THE name of Malcolm Webster Ford is familiar to our readers through his connection with the AUTOMOBILE MAGAZINE as editor; and they are no doubt familiar with the tragedy that closed his life. That life was a failure, not that the man was lacking of the attributes which make up the warp of a successful life; but because in his manhood he received an inheritance of galling injustice which turned geniality into bitterness and led to brooding over the wrongs inflicted until it unbalanced his reason and moved him to end his own life and that of his brother. For no just cause the father, a man of great wealth, disinherited Malcolm and left him to struggle against unexpected penury, while the rest of the family were left rolling in the lap of wealth and luxury. Malcolm believed that his gifted brother Paul, the well known author, influenced the father against him, and he grew to look upon Paul as the author of his misfortunes. When eternal justice comes to be meted out, we believe that the father will be adjudged the slayer of his two sons.

The Inns and the Outs

WITH better roads and the general use of motor vehicles there will again arise a demand for a superior class of country inns. It was supposed that the bicycle, through the largely increased traffic on the highways that followed its introduction, would bring about that result, but these anticipations have not been realized. As a rule the bicyclist was a road traveler, who sought for quantity and cheapness in his food and drink supply, rather than quality and agreeable surroundings, such as appeal to the automobilist.

The landlord of a country inn as it was many years ago, when the highways were the principal avenue of travel, was a man who not only had knowledge of the culinary art, but who gave personal attention to details of his kitchen. He was learned in the method of how to treat commonplace ailments, so that they would attain the level of delicacies.

Some of these inns were so famous for the serving of special dishes on certain days of the week that travelers would avail themselves of this custom and arrange their halts in order to enjoy a succession of exceptionally delightful feeding from one end of their journey to the other.

The speed and the comfort of motored carriages make a journey of forty to sixty miles into the country agreeable and rapid. To encourage traffic of this character there must be provided here and there inns, where a stay of two or three days would offer superior gastronomic diversion. Their fame should be built upon the perfect preparation and serving of possibly a dozen dishes, which should never be allowed to vary in quality.

To accomplish this a landlord should be practically learned in the culinary art, so that he could exercise more than perfunctory supervision over his kitchen. In these days proprietors of hotels or inns give no attention to anything but the financial management of their establishments. As a rule they have no epicurean impulse, and they confide the most important department—the cuisine—to cooks and stewards, whose interest in their work does not aspire to more than mere routine results.

An enterprise such as is suggested should combine the character of an inn and a club. Its capacity should be confined to the caring at one time of not more than fifty people, and those only for a transient stay. It should be made exclusively a resort for lovers

of good living, where with appetites sharpened by rapid movement in the open air they could have positive assurance that upon arrival at their destination perfect service and the most conscientious efforts of the culinary art would await them, to say nothing of a proper care and attention of the conveyances which has brought them to mine host's.

Dawn of Decent Highways

THE State Engineer of New York will soon advertise for bids for the construction of 186 miles of improved roads under the Good Roads law of 1898, for which the recent Legislature made possible the expenditure of \$1,600,000, half of which is to be borne by the State and half by the localities.

In all, sixty-five roads are to be improved during the coming year, the number of miles in each county being: Albany, 8; Broome, 3; Chenango, 5; Cortland, 2; Erie, 25; Fulton, 5; Monroe, 49; Montgomery, 12; Oneida, 5; Onondaga, 7; Orange, 26; Rensselaer, 6; Rockland, 6; Schenectady, 2; Tompkins, 2; Ulster, 19; Washington, 7.

The leaven of improved highways is working and the good effects thereof will, in the near future, be self-evident. In the meantime it behooves all progressive citizens whether they own automobiles or horses, or for that matter, neither of these, to see that the leaven of concerted action is maintained, so that we may not lapse into the unfortunate condition of so-called road "improvement" which we are now so fortunately leaving behind us.

The Mission and the Machine

ANYTHING with a first-class, up-to-date mission is more likely to win, "so they say," than is something that has no really practical and valid excuse for being.

The automobile was born with a mission—not a narrow, selfish mission, but one whereby others are to be benefited. We understand this is a very desirable feature for a mission to possess in order to have it run well.

"Non nobis solum" is what a very fresh college graduate, or a man owning a "Handy Dictionary of Foreign Words and Phrases," would introduce about here. In good Broadway English it means "not for ourselves merely." Well, anyhow, that's the way it is with the motor vehicle.

From the time when Columbus discovered us to the present day, this country has been in need of good roads. We have invented and built railway lines, and trolley lines, and cable roads, and elevated roads, and subways, and lots of other cute and curious things, but we have always been short on just good, common every-day roads such as one could wish to find about the country, outside of the paved, stony hearts of cities.

These roads have been blindly yearned for during the slow drag of dusty and mud-mired centuries, but they didn't come. Mainly because horses couldn't ask for them, although it is said that the donkey, always credited with wisdom, has brayed for them.

Man is a thoughtless, selfish, inhuman being, and not until several years since he tried to ride a bicycle over the stones or through the mud was his mind brought to a realization of the awful condition of the highways, and his heart touched with pity for the poor, dumb brutes he had been lashing for ages. Now, men want good roads for themselves and for others.

"Their cause I plead—plead it in heart and mind;
A fellow-feeling makes one wondrous kind."

An automobile with no road to ride it on is of no particular value. On a poor road it is of little value. On a good road it is of much value. A railway locomotive, with no rails to run on, wouldn't amount to much. It's the same way with all vehicles. The better the road, the better the vehicle or means of travel. If the roads are so a horse can't get over them, he is of no value as a means of transportation. His value increases with the quality of the road. The automobile in doing good things for itself, must do goods things for others.

That is its mission. Do all you can to aid in its fulfilment.

It is a good mission. And then, too, the automobile has other missions, such as bringing health and happiness to men and women, etc., etc. But first, last and all the time, it is a good road maker. If it had no other mission this would be enough to keep it busy.

Laugh at Trouble

WHY is it that the average owner of an automobile is so unreasonable? So many complaints—childish ones mostly—come to this office aimed at every vehicle and almost every part thereof that it would seem to be little short of a miracle that anyone ever found any pleasure in the ownership or use of an automobile.

If one could expect to get from the complaint makers anything but complaints we might be tempted to ask why should automobilism any more than other enjoyments be entirely without disadvantages? One must take the bitter with the sweet. Some days must be dark, some roads rough and some hills unsurmountable. The sun does not shine on motor vehicles when the rain is drenching the pedestrians as they hurry on their respective missions. Why should it?

Tires will go wrong, machinery will become perverse and accidents will happen occasionally, no matter how well made the vehicle or how careful and competent the owner. A true sportsman is never disheartened at these little rebuffs, and those who have the spirit of adventure should look upon all such incidents as but diversions from the ordinary monotonous rides whereon everything runs smooth and clockwork like.

Novices should remember that they cannot learn to manage so complex a problem as the motor vehicle is in a few days. They must expect a few accidents and some not altogether pleasurable experiences before they are proficient enough to graduate from their novitiate. Veterans at the game should not be above a reminder that although they may have mastered the art of automobilizing and have acquired perfect control of themselves and their vehicles that even so they are not infallible.

We live in a world of circumstance, and the least expected often happens. We are creatures of impulse, and consequently it takes little to bedim our brightest thoughts. Why should we not pass by these little contingencies and look at the sport in its pleasanter aspect?

The habit is easily acquired, and a smile where a frown is provoked will often soften the irritation which one so often feels when the vehicle and everything connected with it seem bent on going just as contrarywise as they can.

Yesterday and To-day

THERE was a time when we could step outside the city limits, or go even into the city streets in the later evening, and think with Ruskin:

"To any person who has all his senses about him a quiet walk, over not more than ten or twelve miles of road a day, is the most

amusing of all traveling; and all traveling becomes dull in exact proportion to its rapidity."

Now we have an automobile, and reckon the satisfaction of our day by the linear measure.

Where we used to lounge along the roadway, alone, watching the beetle in the dust or the buttercup in the grass, we rush along and calculate the distance from one highway to another.

Where we used to stand and watch the long lines of light and shadow underneath the trees of Central Park, or the changing stream of faces on Broadway, or sit on Riverside Drive and look across one of the most beautiful night scenes in the world, we now ride rapidly over safe and well lighted roads, in so comfortable and novel a fashion, that scarce a decade ago we would have thought little short of miraculous.

Yet despite it all sometimes foolish memory brings the light of other days around us.

Money may make a mare go; it has always been so alleged and never controverted, but it will not make a magazine go, that is not necessarily so. People have had beliefs contrary to this and paid for having them. Merely spending a lot of money to print a lot of magazines for which there is no demand never benefited any one, except the man who was paid to print them. After two numbers of an extensively and expensively advertised monthly automobile magazine, issued in an attempt to show that a publication could be made successful by the sheer weight of money spent upon it, the promoters have very wisely concluded that the \$16,000 worth of experience they have secured is quite sufficient to convince them that their ideas were wrong and hence it is that the centaurish remains are now in the hands of the funeral director of defunct business ventures—the receiver.

Nothing under the sun is new. William Sheperd Gray declares that Nathan Read, of Danvers, Mass., "was engaged on mechanical and philosophical subjects, particularly the construction of a steam engine, whose power might be advantageously applied to the propelling of boats and carriages," in 1789, five years after Watts invented his first steam carriage and the chronicler shows that the machines were not pushed to a success because Read lacked sufficient funds. Times have not changed so much after all. There is many a good automobile in this year of our Lord which is not being "pushed"

for identically the same reason which 213 years ago prevented the one invented by the Danvers genius from receiving a proper impetus.

Educating the public is not an easy task but it is one which it is commendable to undertake. Such affairs as the Long Island Automobile Club's endurance run and the Automobile Club of America's brake demonstrations are both affairs which are of great value to those who believe in automobiles and those who disbelieve in them. Talk is cheap, it is also unconvincing, as a rule, but seeing is believing when it comes to such things as these. The more the public can see of the efficiency and the practicability of the automobile the better it will be for the man and the vehicle.

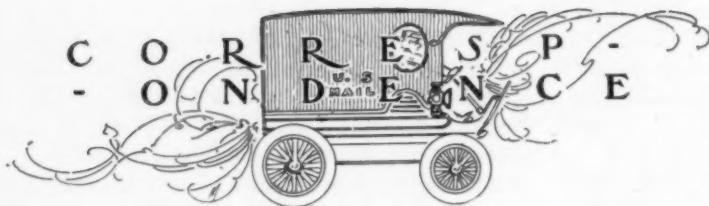
History continues its repetitions. The recent triumph of the steam vehicle in the Nice contests where Serpollet once more left all competitors in the lurch, recalls the fact that the first automobile race ever run in France was won by a steam vehicle in 1894. Stranger still is it that the winner was built by De Dion-Bouton whose names are to-day more closely connected with the steam carriage's strongest competitor, the gasoline one.

The etiquette of automobiling is receiving considerable attention just now and the best of authorities seem inclined to differ as to what is the proper thing to do or not to do under certain circumstances. It is believed, however, that the owner of an automobile which has been run in to by a large bay team and a beer wagon has a right to speak to or at the German driver thereof without an introduction.

Now cometh the day when those possessed of the bravery of a sheep flee unto the mountains and the sea, vainly seeking safety from the automobile when it crieth "tuff-tuff," champeth the brake, and smelleth the battle afar off. Verily, woe has come upon us.

No philosophy will prevent a man from experiencing some unpleasant experiences with a motor; but some of these experiences will interfere with a good many kinds of philosophy.

Horsemen and automobilists should peaceably formulate some agreement as to their respective road rights. Coming together in a violent way cannot be beneficial to either of them.



Capsulated Lubrication.

I HAVE what I consider is a most excellent way to use graphite for lubricating cylinders. Take the ordinary 3-grain gelatin capsules, such as are used to give medicine in, have them filled with graphite and kept handy. When you want to use one, fill your oil cup, drop in a capsule and go frictionless about your business. I have found this to be the cleanest and most satisfactory way to employ graphite in connection with the ordinary oil cup lubrication.

Litchfield, Ill.

W. W. DONALDSON.

Views of a Veteran

I N your May issue you speak of the present feeling against automobiles in New York city, the activity of the police, etc.; and you also deal rather sarcastically with Jersey justice. To begin with allow me to say that I was one of the very first automobilists in the State—a veteran in fact, having started with one of the earliest 'carriages' produced in this country. Since then I have had six or seven different ones and now have a high powered 2,000-pound gasoline machine. So I can at least speak intelligently on the subject.

Now who is responsible for this increased feeling of disfavor and the activity of the police? Why a few idiots who are scorchers and who use no sort of judgment or common sense. They bring the whole sport into disrepute. The man you allude to in your editorial comment on Jersey justice came tearing through this town at an outrageous rate of speed and was utterly reckless. I would send such people to the penitentiary if I had my way. You will

find that most of those who take the AUTOMOBILE MAGAZINE will not thank you for any efforts on your part to excuse or defend this sort of thing.

Already I have heard suggestions that the public roads hereabouts be allowed to fall into a bad state of repair so as to protect this community from the visits of such fools as one I met the other day. He was coming down the street at not less than forty-five miles an hour with a man standing up in the tonneau waving his hands for everybody to turn out and leave him the whole road. Automobilists should be the very first to resent this action on the part of a few which can only bring restrictive legislation against all.

Morristown, N. J.

VETERAN.

[We quite agree with our correspondent that it is the unthinking, uncaring few who bring all automobiling into discredit. In our editorial we admitted this, but protested against the police making the many suffer for the sins of the few, as they are now doing in New York, where indiscriminate arrests are constantly being made without any regard to the guilt of the accused further than the ownership of an automobile and the allegation of the policeman that the speed limit was being exceeded. In the second instance it was because we assumed the man arrested in New Jersey was as guilty as our correspondent says he was, that we commented unfavorably upon the New Jersey judge letting him off so lightly. It takes more than a paltry fine of \$17.45 to deter a scorcher, and it was with the judge's lessening the fine to that sum, not to his having inflicted a fine in the first place, that we found fault.—Ed.]

About Calcium Carbide

DO not believe that the article by R. H. Denton, in the May issue of the AUTOMOBILE MAGAZINE should be allowed to pass uncriticized. In the first place acetylene gas is not the result of fusing together limestone and rock-salt, but is the direct combination of calcium, the base of lime, and carbon under high temperature, and termed calcium carbide.

Second, it was not discovered by Thomas L. Wilson, but was known some time before the discovery that he actually made. The gas and its characteristics were described in Watt's Dictionary of Chemistry, Vol. I, p. 41, under the name of "Acetylene," published in 1888. Among the various ways of producing it was described that of the action of water on calcium carbide. Wilson, therefore,

neither discovered calcium carbide, nor the gas derived therefrom by the addition of water. What Wilson did discover was that in the high temperature of the electric furnace calcium carbide could be readily formed, and that is all. Rock-salt or sodium chloride has nothing whatever to do with its formation.

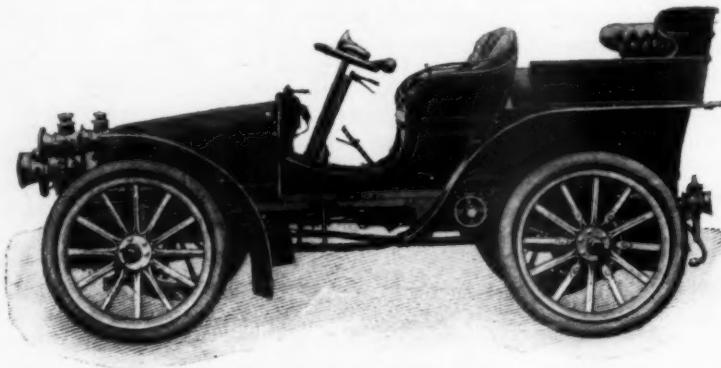
Detroit, Mich.

R. A. PARKER.

Wants a Low Steam Carriage

MAY I have a little space to air a grievance, not personal but affecting the whole automobile industry? I am a steam man, born next door to a factory and handling steam engines all my life, but when I see the business-like design of some of the gasoline carriages, I am almost inclined to give up my steamer for one.

In the first place the steamers are all too high, every last one of them, and the "horseless" carriage is altogether too pronounced.



I want a motor carriage, not a horseless one. Let makers try and forget what they know of horse-drawn vehicles and start fresh from the motor (or motive power) up.

Instead of taking a Stanhope carriage body and cutting machinery to fit it, then filling every cubic inch that is left with tanks for air, water and gasoline, why not build the running gear—(low of course)—and arrange on machinery to the best advantage? Then build a body to suit, modifying it a little if necessary to conform to the rest. The picture herewith shows what an English concern has done in this direction.

There are lots of men who want steam machines, but who want

a different design from any now on the market. I could name one or two vehicles (if I dared) which would suit me exactly if their excellent mechanical details were put into a different type of carriage. Can't you induce some maker of steam vehicles to make a body and running gear to suit us cranky fellows who want them?

Nutley, N. J.

R. B. ROYCE.

The Bell of Bells

It is generally conceded that E. R. Rockwell, manager of the Liberty Bell Company, Bristol, Conn., is not only the Nestor of bell makers (bicycle) but he is also the pioneer automobile bell maker as well. Not long ago he was referred to in an article as the Tiffany of bell makers, which is a distinction high enough for anybody. Mr. Rockwell's latest automobile bell is a rotary musical chime operated by the hand, the bell being placed on the steering lever. The bell shown here is seen on an Oldsmobile, to which company the Liberty Bell Company are extensive purveyors. The Liberty Bell Company also make the foot pressure automobile and a variety of other high grade bells. The principal dealers in automobile goods carry the company's product.



How Hall Helps You

To properly and continuously lubricate an automobile is as important to the welfare of the vehicle as to the comfort of its user. When, however, it comes to accomplishing this the ordinary automobile finds the task an unusually difficult one unless it is his good fortune to settle upon some similar method to the one which the Hall Mfg. Co. of 40 Cortlandt street, New York, use. Lucky indeed is he who thus early in his career removes from himself one of the greatest annoyances connected with the use of the motor vehicle.

There Are Others

"Was Ananias a great liar, pa?" asked Willie Writemup.

"Yes, for his time, my son; of course, there has been a great deal of improvement in that line since."

And with this the senior Writemup proceeded to put the finishing touches upon the Motor Manufacturing's catalogue, at the compiling of which kind of literature, Mr. Writemup was justly deemed an expert.

Good Way to Save Insurance

The Gilbert & Barker Manufacturing Co. of 82 John street, New York, whose plant is located in Springfield, Mass., have given the insurance companies, metaphorically speaking, a clean upper cut by supplying a storage gasolene tank, which is placed underground and whose patented construction makes the task of drawing gasolene as easy as pouring out a glass of wine. Insurance rates, now all the way from 2 to 4 per cent., are receiving attention of a negative kind from automobile people who are keeping the Gilbert & Barker people busy. The cost of the tank is saved in insurance reduction—and oftentimes insurance is not taken at all.

The Brennan Manufacturing Co., gasolene motor builders, of Syracuse, N. Y., are naturally pleased with a testimonial received from Clemson College, S. C. Prof. Albert Barnes of the mechanical engineering department of the college is a thorough believer in the Brennan automobile motor and has written the makers a letter stating that the Brennan motor had taken the place of two unsatisfactory motors that the college had been trying. Mr. Brennan deserves great credit for the way in which he has persevered in overcoming the little defects of the motor bearing his name, which is now in the first rank of those favored by the advanced builders of automobiles.

Duty and Determination

"It all, I see, depends on me,"
Said the boiler, "and I must
Stand a pressure that 'll win the race
And I'll do it, too, or bust!"



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